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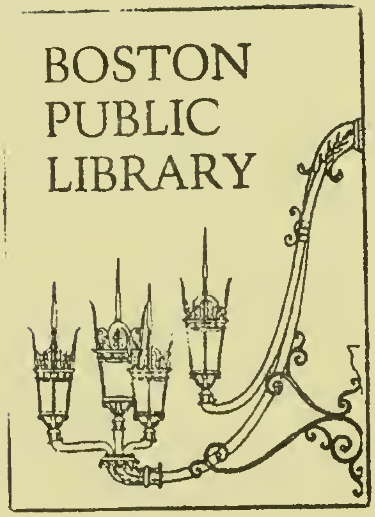

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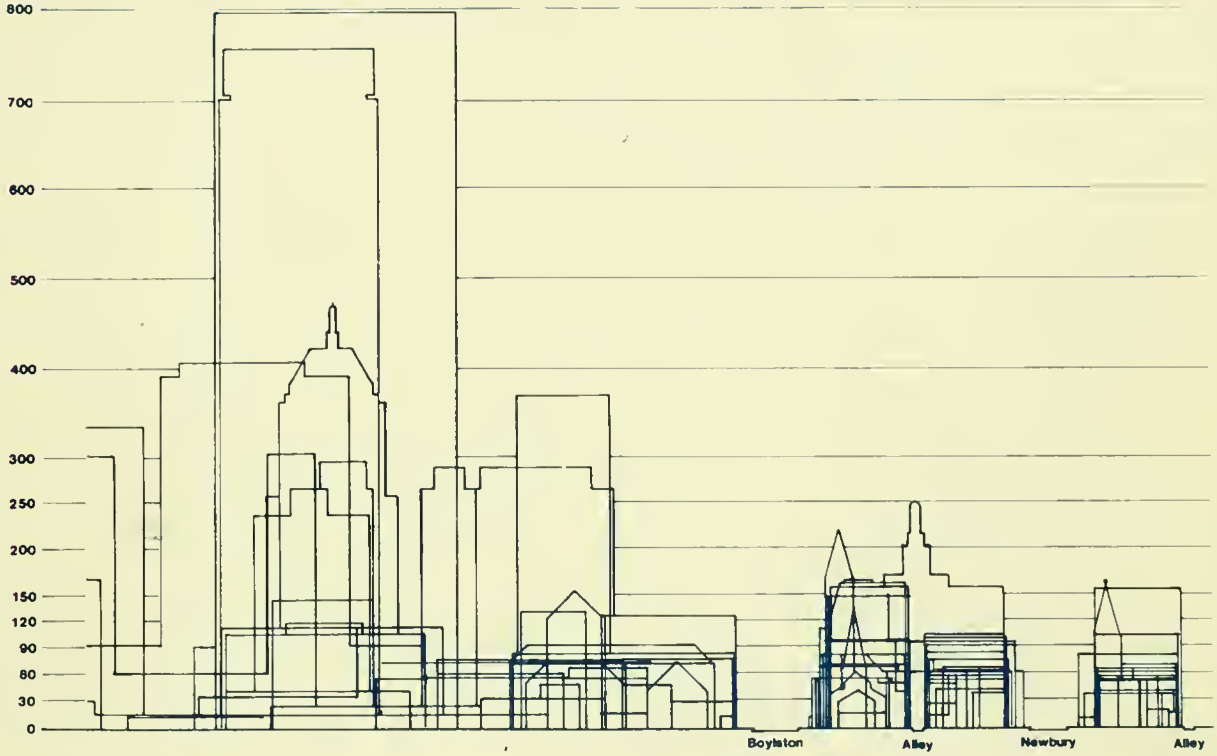

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BOYLSTON STREET ZONING STUDY

AN INTERIM REPORT

March 22, 1985

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BOYLSTON STREET ZONING STUDY
AN INTERIM REPORT

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INTRODUCTION

INTRODUCTION

In recent years, Back Bay's popularity as a place to live and work has grown tremendously. As a consequence, much new development has followed. Boylston Street, in particular, is thriving with new construction and renovation. Existing development controls, however, were instituted at a time of little economic growth in Back Bay, and are no longer adequate. The Boston Redevelopment Authority (BRA), therefore, as the City's planning agency, initiated this study of Boylston Street to determine what changes in development policy are needed to meet the present-day needs of Back Bay both as a neighborhood and as a part of downtown and the city as a whole.

The tools presently used to control and structure Back Bay development were designed to promote growth in that neighborhood, but did not adequately address other important issues like preservation, urban design, and environmental protection. These existing tools were height limits initially, and then later, the more innovative floor/area ratio or FAR controls.* FAR, a density formula which relates the allowable floor area of a building to the size of its site, was intended to directly regulate the bulk of a project and, less directly, its height. But height limits and FAR controls cannot adequately address design elements which determine the apparent massing of a building, the impacts on sunlight, daylight, and wind conditions, and certain design characteristics such as rhythm, harmony, texture, and openness that help preserve and protect the Back Bay's fine urban fabric. In recognition of the need for new tools to mediate conflicts between growth and preservation, between enhancing and protecting the neighborhood, this Report proposes new design and massing guidelines, expanded architectural historic district guidelines, and revised height and FAR controls. We believe these revisions will promote and manage new development and renovation that respects the architectural uniqueness and historic nature of Back Bay, that complements the systems of design used there, that reinforces human scale, and that respects Back Bay as both a neighborhood and a place of commerce.

---

* FAR is the figure that results when the total floor area of a building is divided by the total lot area of the site. Under present zoning rules, for example, a FAR of 10 allows a building that covers the entire lot to be ten stories tall. A building of 20 floors is allowed if only half the site is covered, and 40 floors is allowed if a quarter of the site is covered, providing there are no height restrictions. With a 155 foot height limit and a ten FAR, no more than 12 or 13 floors is allowed.

The focus of the study is Boylston Street, one of the city's most unique streets because it serves as a boundary between two distinctly different areas. On one side of Boylston, grand and sweeping landscaped avenues and graceful Victorian brownstones evoke a genteel and stately 19th-century Boston. On the other side, a thriving commercial sector contains the headquarters of many corporations, the ultra-modern architecture of the John Hancock Tower and Boston Public Library addition, and many elegant, quality retail shops.

The continued success of Boylston Street will require a balance between new growth and preservation. Not only is there need and room for both, but in fact, the two are inter-related and complementary. That is, the appeal of living and working in Back Bay stems in part from its distinctive architectural legacy and 19th-century charm. That appeal is important not only to the quality of life, but also to the area's economy because it attracts investment. In many cases such investment is directed toward the preservation of existing buildings for offices, retail stores, and residences. In Boston, most restoration of historic buildings and public spaces has taken place in time of growth, not decline. Attracting investment for renovation and restoration is difficult if an area is not also attracting new development that promises future strength and stability.

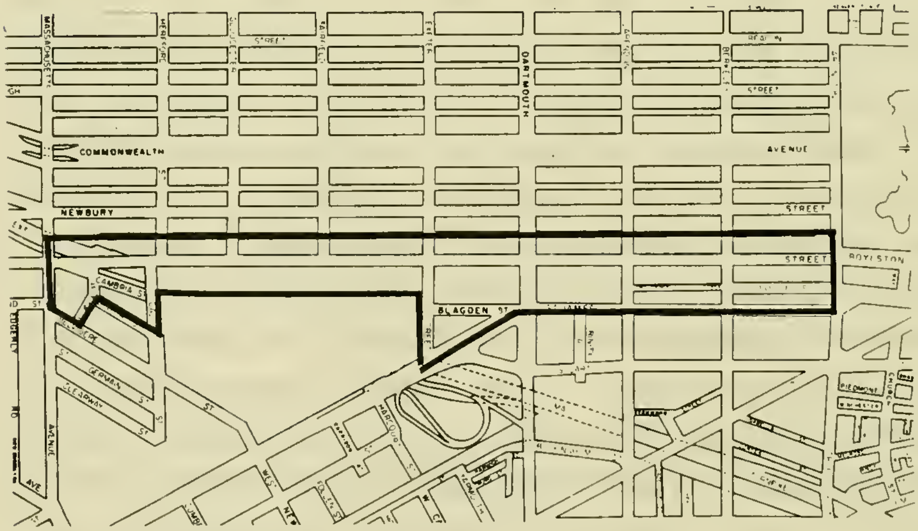
In Back Bay the substantial growth allowed under existing zoning regulations would be concentrated along Boylston Street. Our area of concern, however, is the entire Back Bay, and the analyses leading to our recommendations assess the impacts of Boylston Street's development on the district as a whole. If development of substantial magnitude continues at its present rate, and is not addressed through revisions to the Zoning Code, living and working conditions in the Back Bay may be severely affected. In particular, Back Bay residents are concerned that additional development on Boylston Street's north side--if built to the height (155 feet) and density (FAR 10) now permitted by existing zoning regulations--would produce intolerable conditions. Their concerns include shadows on Newbury Street, greater traffic congestion on already heavily burdened east-west cross streets such as Berkeley and Clarendon, crowded sidewalks and public spaces, and the "canyonization" of Boylston Street itself.

Likewise, business people, while encouraged by the economic revival of Boylston Street and its environs, are concerned that the design of new developments further improves the Street's image. They cite New York City's Fifth and Madison Avenues as counterparts to Boylston Street.

This zoning study was initiated to address the concerns of Back Bay residents and business people. We studied (1) people's perceptions, both positive and negative, about the area; (2) the existing physical context; (3) anticipated changes to that context; (4) current regulatory controls; and (5) the economic impacts of altering those controls. Initially, public comments were solicited, existing zoning regulations were surveyed, and six sub-areas of Boylston Street were defined. Then, the study area was analyzed in three important ways. This Report, using our design analysis, describes architectural proportioning and ordering systems that give Boylston Street its integrated framework and pleasing architectural rhythm. Also included is a Boston Landmarks Commission survey which rates over 50% of all Boylston Street's buildings as significant to the city of Boston or important to the character of Boylston Street. Second, a traffic and parking analysis sets forth the relationship of land use and zoning controls to transportation. Vehicular traffic volume and parking demand are compared at different building densities. Finally, an economic analysis examines the feasibility of altering the FAR in the Boylston Street study area. The survey and analyses, summarized below, are fully discussed in Chapter I; they are the basis for our recommendations. These recommendations, highlighted below, are proposed in detail in Chapter II.

Summary of Recommendations

Because the magnitude of development mostly determines the impact of development, managing growth and change requires carefully controlling density and maximum height. In addition, careful analysis of the historic architecture and design of Boylston Street showed that improved methods for historic preservation and design review were needed as well. Our recommendations are summarized on the following pages.



Boylston Street Study Area

- Zoning

  Existing height limits and floor area ratios (FAR's), described in Chapter I, are excessive in portions of the study area and should be reduced. On the north side of Boylston Street, the maximum allowable height should be lowered from 155 feet to 120 feet, and the maximum FAR reduced from 10 to 8. The special character of Copley Square and historic buildings in its vicinity warrant even greater protection. In order to maintain the prominence of those buildings, development on that part of Boylston Street should be no taller than 65 feet, and no denser than FAR 6, with the possible exception of the Exeter-Fairfield block. On the south side, heights should be maintained at 90 feet in the lower blocks and at 120 feet along Prudential's frontage.

- Historic Preservation

  The special character of Back Bay is shaped in part by its historic buildings, some of which are individually distinctive and others of which are significant as elements in an ensemble. Zoning controls can help to maintain an appropriate modest scale for development in their vicinity, but additional government action is also needed.

  Our recommendations include further historic investigation of one area, the "Triangle Block" (Exeter-Blagden-Huntington) located between the Boston Public Library and the Westin Hotel, to identify buildings worthy of preservation. Elsewhere two buildings, the Trinity Church and the original library, merit landmark designation. To protect buildings which collectively represent Back Bay's past, we recommend that the Back Bay Architectural District be expanded across Boylston along the Arlington-Berkeley block (and possibly other blocks), and along the Prudential frontage to Massachusetts Avenue.

- Design Guidelines

  Design analyses of the buildings along Boylston Street point out the importance of architectural details and proportional relationships of building elements to the character of the street. While the zoning and historic preservation changes proposed above would ameliorate the adverse affects of growth, additional actions are needed to ensure that such design conerns are respected as new projects are built. For that reason, we have outlined design guidelines and proposed that the BRA and the Back Bay Architectural Commission base their development reviews on finally adopted design and massing guidelines.

- Public Improvements

  Some concerns voiced by residents and business people are most appropriately addressed through capital improvements. Implemented over time, improvements could unify the street and create a more pleasant environment for pedestrians. Our strategy for public improvements emphasizes Boylston Street as a major public way, designed as a boulevard which links the Fenway to the Public Garden. To that end, guidelines are proposed for public improvements that can be put in place as development occurs.

The following Report elaborates on our initial proposals for Boylston Street, outlines the methodology used to formulate the recommendations, and describes the detailed analyses which led to them. The study is an interim report, part of an effort initiated by the Boston Redevelopment Authority in the Spring of 1984 and developed collaboratively with a Citizens' Review Committee (CRC). (Members are listed in Appendix I). Over the next several months, the CRC and other interested groups and individuals will review the study and comment on its recommendations. Once there is public agreement on what strategies are most appropriate to enhance the Back Bay, an implementation process will begin.

SURVEY & ANALYSES

I

PERSPECTIVES ON BOYLSTON STREET

> Back Bay is in the midst of change. Rapid commercial development occurred in the sixties and then remained relatively static for much of the seventies. Residential change accelerated during the seventies after remaining quiescent during the sixties. During the eighties, both sectors appear poised for major increases in activity as the natural advantages the Back Bay offers become more prized.
>
> The challenge for Back Bay is to preserve its unique characteristics while this development occurs. It will no longer be necessary to promote development as has been done in the past; the new priority must be to channel development pressures into areas and types of activity that will be most beneficial for the area as a whole and compatible with its best qualities.

Back Bay Development Goals
Back Bay Federation for
Community Development,
May 17, 1983

The first step in the survey was determining the public perceptions of Boylston Street in order that the study address major concerns of people most familiar with the Back Bay. A questionnaire was distributed to the twenty-three organizations represented on the Citizens' Review Committee.

These organizations include neighborhood-based community groups (Neighborhood Association of the Back Bay, St. Botolph Citizens' Committee, Bay Village Neighborhood and Ellis Neighborhood Associations, and Fenway Civic Association); neighborhood business groups (Back Bay Association, Newbury Street League and Boylston Street Association); an umbrella neighborhood residential/business group (Back Bay Federation); major Boylston Street institutions (Trinity Church, New Old South Church and the Public Library); city-wide organizations (Society of Architects, Chamber of Commerce, Greater Boston Real Estate Board, Preservation Alliance and Greater Boston Hotel Association); political representatives (district city councillor and local state representative); and city and state agencies and commissions (Back Bay Architectural Commission, Landmarks Commission, the Mayor's Office, the Mass. Convention Center Authority, and Boston Redevelopment Authority).

The questionnaire addressed the following: (1) image; (2) uses; (3) impacts of growth; (4) preservation; and (5) scale. In addition, participating CRC organizations were asked to submit written position statements relating to the zoning study. (A matrix chart of these position statements is in Appendix II).

The respondents agreed on a number of issues and disagreed on others, the division generally centering on how to balance neighborhood protection with economic growth. The major areas of agreement are summarized by categories below.

- Image and Impacts

  Boylston Street has both a city-wide and neighborhood context. City-wide, it is an integral part of the downtown commercial district and part of Boston's rich cultural and architectural heritage. For both the larger downtown area and the residential neighborhood, Back Bay's low buildings and open spaces have created the sense of Boylston Street as a graceful boulevard connecting two parts of the city. For the neighborhood, however, a major concern is changes in its character, particularly along upper Boylston Street. A critical issue is preserving the Back Bay residential neighborhood, threatened by crowding from adjacent development.

- Existing Use Problems

  Existing uses (particularly ground floor) and recent developments are a major concern. According to the Back Bay Federation, marginal retail uses depress street life. The Boston Society of Architects stated that "recent buildings have created a negative impact on quality of life and deny human scale to it." Of concern to the Ellis Neighborhood Association was "parking, traffic and balance of tourism and neighborhood service needs." Old South Church stated that "high turnover of uses on upper Boylston Street" was a problem.

- Future Growth -- Where and How?

  All members felt that new development should occur within the context of an updated master plan. In addition, the Back Bay Federation, the Newbury Street League, the Boylston Street Association, the Back Bay Association, and the Greater Boston Real Estate Board felt that up-grading and new growth should be especially encouraged on upper Boylston Street blocks (west of Exeter Street). Bay Village Neighborhood Association felt that mid-rise residential buildings would help support necessary retail and service activity in the area. Many groups mentioned the need to investigate current groundwater conditions, and utility and other infrastructure capacity, in planning for growth.

- Preservation

  Protection of the existing architectural diversity along Boylston Street was emphasized by all groups. A number of organizations such as the Neighborhood Association of the Back Bay, Back Bay Federation and the Landmarks Commission felt that the Back Bay Architectural District (which is limited to Boylston Street's north side) should be extended to include the south side blocks as well.

- Pedestrian Amenities

  A number of organizations felt that additional pedestrian amenities were needed. For example, the Real Estate Board promoted more "street edge activities such as cafes in dead areas." The Neighborhood Association of the Back Bay wanted to find ways to strengthen pedestrian movement between the several shopping zones. The Bay Village Neighborhood Association stated that "trees would help promote symmetry" for pedestrian movement.

- Design Review

  With the exception of the Boylston Street Association, all organizations generally believed that additional design controls and more intensive design review are required to guide new development and protect Boylston Street's heritage.

The major differences in outlook by members of the Boylston Street CRC are grouped and described below.

- Height and Massing

  Those members of the CRC reflecting preservation interests and neighborhood viewpoints generally favored lowering the B-10-155 zoning height limit on the north side of Boylston Street, as well as reducing the allowed floor area ratio below ten. Their reasons for this change included maintaining the skyline, controlling traffic, and minimizing the impact of shadows in the Back Bay. The Old South Church was the most adamant, recommending lowering the FAR to 6.0 and proposing the establishment of an improved design review process to further control the height and appearance of new buildings. Having opposing views were the Back Bay Association, Newbury Street League, and the Boylston Street Association.

- Traffic and Parking

  Neighborhood and commercial interests differed distinctly on this issue. Neighborhood groups sought a reduction in traffic and parking demand, while commercial organizations wanted to balance residential parking requirements with those of shoppers, office users, and tourists. The Greater Boston Real Estate Board felt that new development should provide its own parking, while the Landmarks Commission believed that the need to accommodate parking has led to inappropriately high buildings on Boylston Street. The Preservation Alliance was concerned that additional Boylston Street growth would cause parking shortages outside the study area.

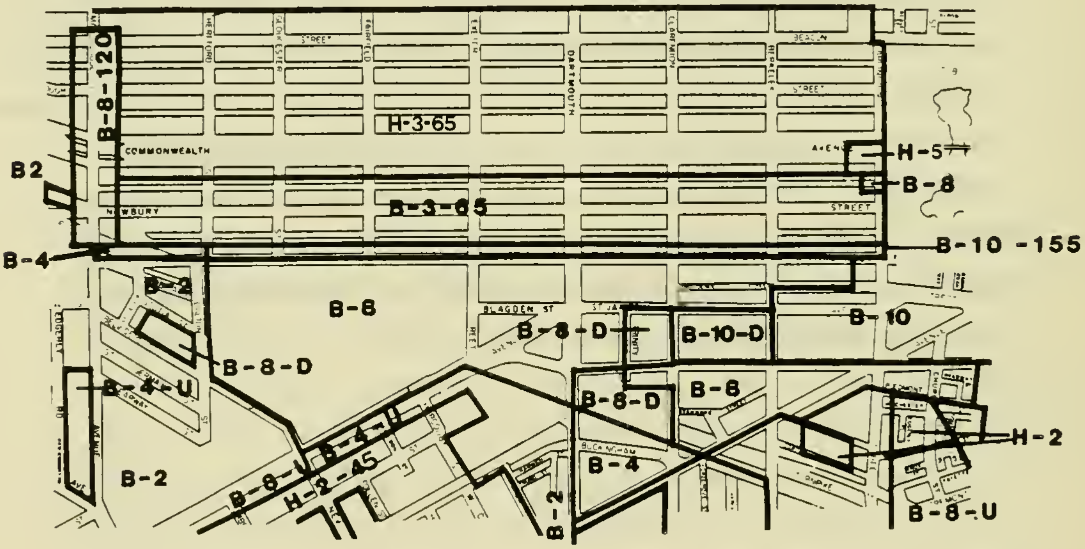
- Economic Development

The dilemma in evaluating Boylston Street's future economy and economic well-being is whether lowered heights and reduced scale will impair building quality and depress future development and preservation. The neighborhood organizations felt that a better balance should be established between neighborhood and city-wide needs despite economic implications. The commercial organizations believed that changes such as down zoning could dampen the future development vital to Boylston Street's well-being.

ZONING AND OTHER REGULATORY CONTROLS

Existing Zoning - Newbury and Boylston Streets

During the 1960's, the prospect of high-rise development in Back Bay began to receive public attention. As a result, Boylston Street's relationship to Newbury Street and the Back Bay residential area came under intense scrutiny and debate. Zoning changes were made to protect the residential sections. After lengthy public discussion and debate, the Zoning Commission approved reducing the height limit to 65 feet in all of residential Back Bay and the residential and commercial portions of Newbury Street between Arlington Street and Massachusetts Avenue.



Existing Zoning

Zoning along both sides of Massachusetts Avenue was designated B-8-120 because existing buildings conformed to these limits and the designation allowed for some growth in future years. Similarly, the southwest corner of Commonwealth Avenue across from the Public Garden was designated as an H-5 zone with a 155-foot height limit (to parapet line) to provide for development on the vacant parcel adjacent to the Ritz-Carlton Hotel.

In 1973, new zoning was adopted to channel further development on Boylston Street. This was accomplished first by designating the north side of Boylston Street between Arlington and Hereford Streets as a B-10-155 zone. To encourage residential development here, a bonus to 200 feet was permitted if the additional 45 feet was devoted to residential use. Second, the blocks from Hereford to Massachusetts Avenue were designated B-4. However, the B-4 designation has not promoted new development, probably because of the premium costs associated with air rights development over Massachusetts Turnpike areas. The following Table describes the permitted uses by existing zoning designations.

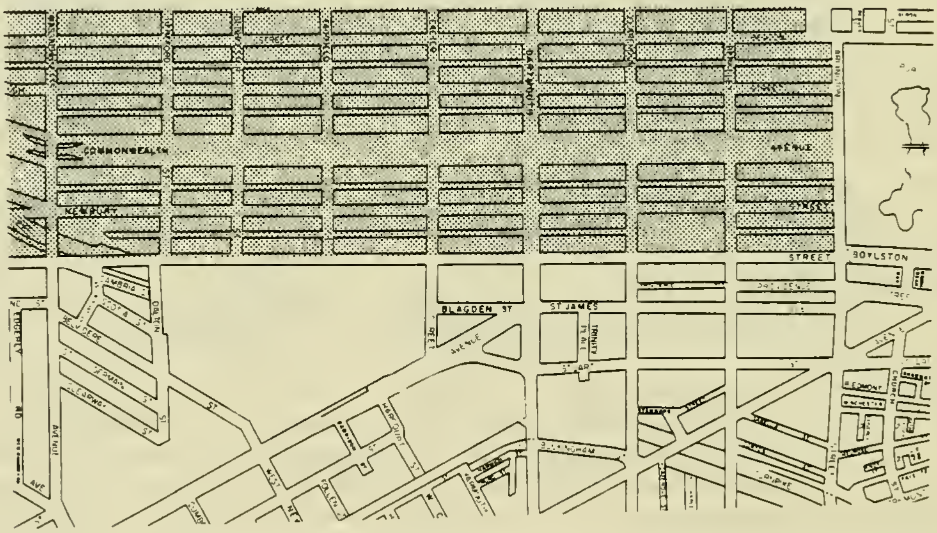
Existing Zoning Designations
Summary of Permitted Uses Within
Boylston Street Zoning Study Area

Zone	Name and Permitted Uses
B-2	Retail Business and Office: All residential uses and most office, retail and business uses are allowed. Floor area ratio maximum of 2.0 permitted.
B-4	Retail Business and Office: Same as B-2, except Floor area ratio maximum of 4.0 permitted.
B-8	Retail Business and Office: Same as B-2, except Floor area ratio maximum of 8.0 permitted.
B-10	Retail Business and Office: Same as B-2, except Floor area ratio maximum of 10.0 permitted.
B-10-155	Retail Business and Office: Same as B-2 except Floor area ratio maximum of 10.0 permitted. Maximum height to parapet line permitted is 155 feet. (Residential over 155' permitted to 200' if next to street corner.)

The Back Bay Architectural and Historic Districts

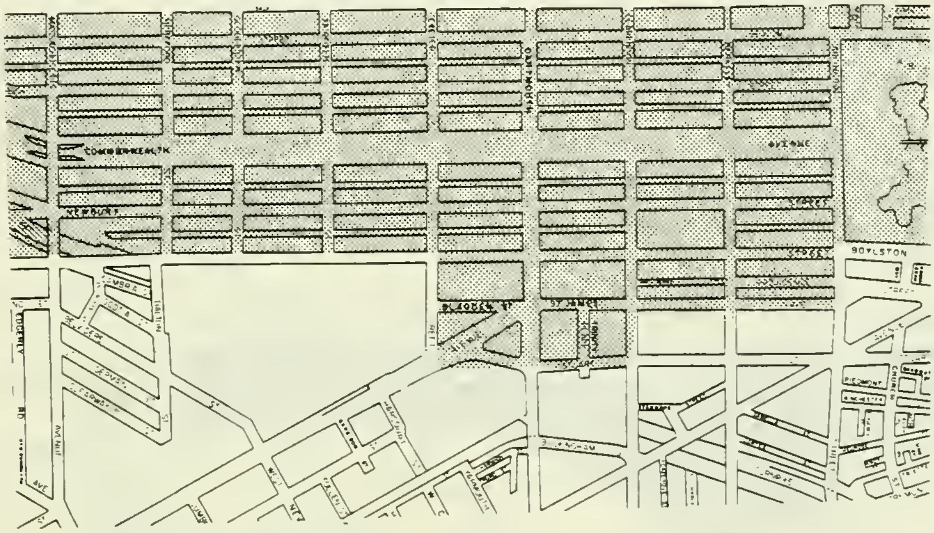
In addition to zoning regulations, controls based on architectural or historical distinction play an important role in Back Bay. In 1966, the Back Bay Architectural District and Commission was established and empowered to protect the distinguished Victorian architecture of the Back Bay by requiring design review and approval of all changes to building exteriors seen from a public way. The authorizing legislation, which covered the residential portion of the neighborhood, was amended in July, 1974 and again in October, 1979 to extend the boundaries to include all of the thriving commercial area of the Back Bay. In January 1982, the Back Bay Architectural Commission's jurisdiction was extended to include all exterior architectural features, including those not seen from a public way, and for the first time placed under control the rear and rooftop portions of buildings.

In its review of architectural proposals, the Commission may consider height, design, and mass in relation to other structures, and related considerations which could affect its decision on the appropriateness of the proposal. To protect the Back Bay's architecture, the Commission has adopted a set of design guidelines.



Back Bay Architectural District

To enforce its decisions, the Commission is empowered to issue or deny a Certificate of Appropriateness for proposed construction or rehabilitation. A Certificate is necessary before an applicant may obtain a building department permit for exterior work, other than maintenance, within the District.



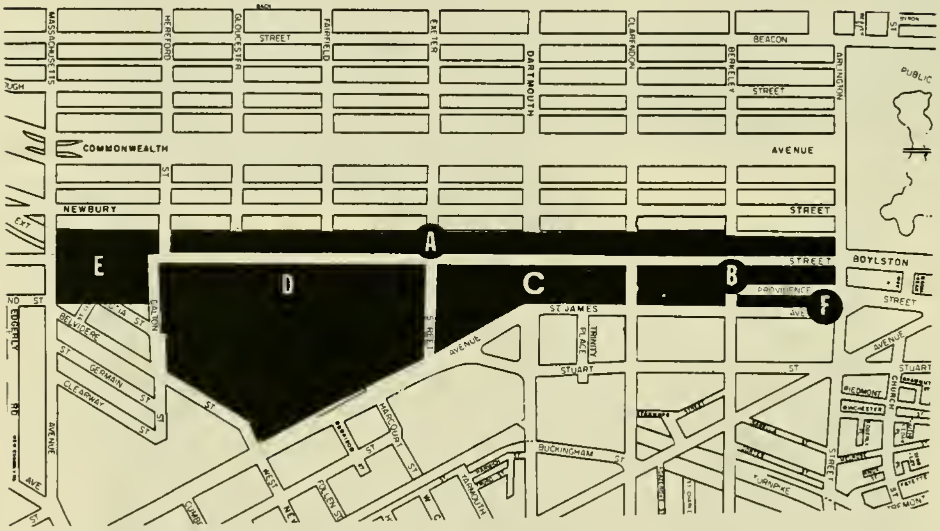
Back Bay National Register District

Boylston Street, as part of the Back Bay District, is also listed in the National Register of Historic Places and the State Register. The listing means that public discussion and review must take place on any action, affecting a building or site located within District boundaries, proposed by any federal or state agency or entity requiring a federal license or utilizing public funds (including an environmental review if the federal government is involved).

DESCRIPTION OF SUB-AREAS

For purposes of this Report, the Boylston Street study area is divided into the following six sub-areas:

A Boylston Street North
B Lower Boylston Street South
C Copley Square Area
D Prudential/Lenox Block
E Upper Boylston Street
F Park Square Building



Boylston Street Sub-Areas

Each of these sub-areas is described in terms of zoning, height, architectural or historical significance, current use, street facade or block, existing floor area versus potential build-out, and projects proposed or underway (see Appendix III for a complete description of projects proposed or underway).

Overall, including Prudential, Hynes Auditorium, and St. James Avenue garage redevelopment plans, approximately seven million new square feet of floor area could be added within the study area if development was built-out to present zoning limits. (See chart on following page).

SUMMARY

POTENTIAL AREA BUILD-OUT ANALYSIS
(Allowed By Current Zoning)

SUB-AREA	Existing Floor Area	Potential Build-Out Under Existing Zoning	Total Floor Area with Build-Out
Boylston Street North	1,543,700	1,768,000	3,311,700
Lower Boylston Street South	850,000*	1,660,700**	2,510,700
Copley Square Area	185,000	155,000	340,000
Prudential/Lenox Block	4,671,000	3,500,000***	8,171,000
Upper Boylston Street	37,000	****	****
Park Square Building	386,000	---	386,000
TOTAL:	7,672,700	7,083,700	14,719,400

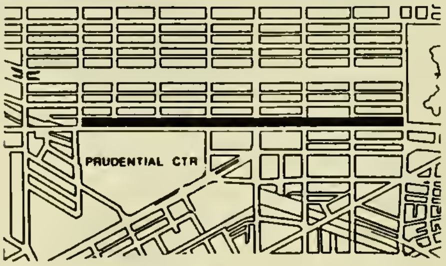
* Includes 300,000 square feet of parking within the City's St. James Avenue garage facility.

** Includes 500 Boylston Street Project which is proposed to exceed the maximum permitted FAR by 200,000 square feet.

*** Includes Prudential Center and Hynes Proposals which are not necessarily at maximum permitted FAR.

**** Cannot be predicted at this time because of air-rights development issues.

o Boylston Street North (Arlington to Hereford)



Number of Blocks:	7
Existing Floor Area:	1,543,700 s.f.
Potential Build-Out:	1,768,000 s.f.
Existing Zoning:	B-10-155
Heights:	65-90 feet
Type of Uses:	ground floor retail, offices and services on upper floors
Projects Proposed/ Underway:	1 Exeter Plaza, 399 Boylston Street, 419 Boylston Street, 857 Boylston Street
Key Issues:	- determine appropriate building heights related to shadow impacts on Newbury Street - protect the historic and design character of existing structures - upgrade retail and commercial activities

The seven blocks from Arlington to Hereford Streets contain most of the commercial and retail activity that make Boylston Street an important commercial thoroughfare and a link to the downtown. On these blocks stand many significant cultural, architectural, and historical structures that contribute to Boylston Street's special style and character. Many of the structures on these blocks are of national significance, for example, Trinity, Old South, and Arlington Street Churches, the Boston Public Library, and Copley Square.

The north side ground floor of Boylston from Arlington to Hereford Streets has continuous retail uses, except the Berkeley-Clarendon block occupied by the original New England Mutual Life Insurance Building.

Retail uses generally include a mixture of small shops, eateries, and gift and art stores. The services provided are often directed to a broad, metropolitan clientele. There is a cluster of banks on the Clarendon-Dartmouth block and large numbers of restaurants, fast food, and coffee shop/bakery operations from Clarendon to Gloucester.

In addition, Boylston Street's north side has buildings in distinct period architectural styles popular during the filling of the Back Bay. Between Arlington and Berkeley, fine row houses constructed during the 1860's still stand. The three and four-story masonry row houses on the block, however, are somewhat obscured by the one and two-story storefronts added in the 1920's.

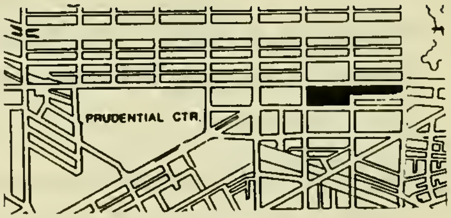
Following infill of the Back Bay, construction activity proceeded from east to west along Boylston Street. New commercial structures of six and eight stories began to appear with ground floors specifically designed for commercial use. The architectural styles used were Beaux Arts, Romanesque, and Renaissance Revival.

The height of the majority of buildings built in the late 1800's through 1910 varies from two to eight stories, but most have four, five, or six stories. This shared but slightly varied characteristic of the older buildings is one of the features which contributes to a sense of gracefulness along the north side of Boylston Street.

The existing structures on Boylston Street still reflect how conditions, like expansion of the Back Bay, methods of construction and building materials, some increase in heights, and varying treatment of windows, have changed over time.

The older structures are far below the maximum height and floor area ratios currently permitted. A number of more recently constructed buildings provide examples of contrasts in height, scale, and mass. For example, 399 Boylston Street and One Exeter Plaza not only demonstrate differences in materials and methods of construction, design, and architecture, but also reflect the greater height and massing allowed under the B-10-155 zoning adopted in 1973. Currently, there is approximately 1.5 million square feet of floor area in the Boylston Street North sub-area. A build-out to existing FAR 10 would add 1.8 million square feet of floor area.

- Lower Boylston Street South (Arlington to Clarendon)



Number of Blocks:	3
Existing Floor Area:	850,000 s.f.
Potential Build-Out:	1,660,770 s.f.
Existing Zoning:	B-8, B-10 (at corner of Arlington and Boylston)
Heights:	65-87 feet
Type of Uses:	ground floor retail, offices on upper floors
Projects Proposed/ Underway:	500 Boylston Street
Key Issues:	- protect existing heights along Boylston Street's frontage. - limit development intensity in areas across from the Public Garden.

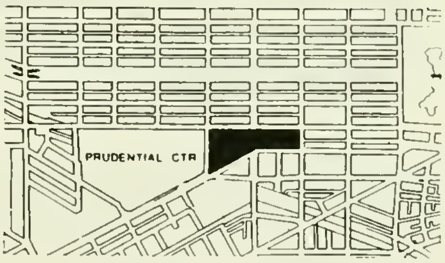
The south side of Boylston between Arlington and Berkeley Streets may be the strongest retail block in Back Bay, with clothing and shoe stores servicing both the neighborhood and the metropolitan area. Buildings are generally two, four, five, and six stories, with structures of architectural significance at both ends and at mid-block.

This block is zoned B-8 except for the Arlington Street corner building (Shreve Crump & Low) which is B-10. None of these structures approach the maximum allowable height and mass under existing B-8 or B-10 zoning.

The Berkeley-Clarendon block presently contains mostly clothing stores, which will be moved if the 500 Boylston Street development is built. That project includes the entire block as well as the St. James Avenue parking garage facility in the rear. Ground floor retail uses and office space above are planned for this 1.3 million square foot building.

In Lower Boylston Street South, a build-out according to present zoning would add 1,660,000 new square feet (including the 500 Boylston Street proposal) to the existing base of 850,000 square feet.

o Copley Square Area (Including the "Triangle Block" -- Exeter-Blagden-Huntington)



Number of Blocks:	3
Existing Floor Area:	185,000 s.f.
Potential Build-Out:	155,000 s.f.
Existing Zoning:	B-8
Heights:	65-90 feet
Type of Uses:	library, church, Copley Square, hotel, ground floor retail with upper floor offices on "Triangle Block"
Projects Proposed/ Underway:	none
Key Issues:	- protect the historic library, churches, and square - establish development and design guidelines for the "Triangle Block"

The Copley Square area extends south from Boylston to Stuart Streets and Huntington Avenue, and west between Clarendon and Exeter Streets.

The area, currently zoned B-8, encompasses distinguished historic structures such as Trinity Church and the Boston Public Library, and well-known sites like Copley Square, the Copley Plaza Hotel, and the Westin Hotel (Copley Place).

Of special interest in this sub-area is the "Triangle Block" (Exeter-Blagden-Huntington) which has come under development pressure because of the success of neighboring Copley Place. The block includes a six-story office building with shops at street level (15-33 Huntington), a seven-story hotel (Copley Square Hotel at the Exeter Street corner), a large seven-story, seventy-unit apartment building, and a vacant site (with a parking lot). Negative factors affecting this block are the Massachusetts Turnpike tunnel entrance and the raised level of Huntington Avenue, which together combine to obscure the hotel and office buildings. Even so, the block is likely to experience more development pressure given anticipated further development of the adjacent Prudential Center.

A Copley Square area build-out would be minimal, primarily concentrated on the "Triangle Block." Approximately 155,000 new square feet could be added to the 185,000 square foot base.

o Prudential-Lenox Block

Number of Blocks: 1

Existing Floor Area: 4,671,000 s.f.

Potential Build-Out: 3,500,000 s.f. - Based on Proposed Plans of Prudential Center and Hynes Auditorium.

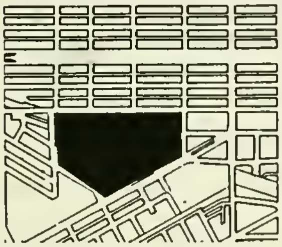
Existing Zoning: B-8

Heights: 35-730 feet

Type of Uses: hotel, retail, office and convention center

Projects Proposed/ Underway: Hynes Auditorium Expansion (underway); Prudential Center Redevelopment (proposed)

Key Issues:



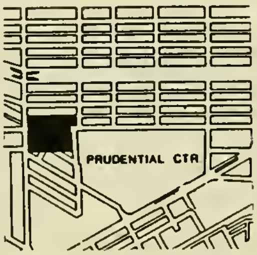
- environmental impacts (i.e., traffic, parking, urban design) from expansion plans being considered for the Prudential Center
- impact on property values created by Prudential and Hynes development plans
- protection of heights along Boylston Street's frontage

This area extends along the south side of Boylston Street from Exeter to Dalton. The distinguished and graceful lines of the dignified Lenox Hotel on the corner of Exeter Street provide an architectural link to an earlier time. The remaining development on this block is associated with either the Prudential Center or Hynes Auditorium. The area is controlled by B-8 zoning. In addition, the Prudential Center is regulated by the Chapter 121A approval process (see discussion of Chapter 121A in Appendix IX).

Plans are currently underway for more intensive development of the Prudential complex. It is anticipated that one design element will be to extend retail development uses to Boylston Street by eliminating the "ring road." This should create a more symmetrical street pattern for the Exeter-Hereford section of Boylston Street. Similarly, the planned expansion of the Hynes Auditorium has the potential to strengthen the Boylston Street edge.

o Upper Boylston Street (Including Massachusetts Turnpike Air-Rights Areas)

Number of Blocks:	3
Existing Floor Area:	37,000 s.f.
Potential Build-Out:	air-rights development could add a substantial amount of square feet
Existing Zoning:	B-4 (north side); B-2 (south side)
Heights:	35 feet
Types of Uses:	police and fire stations, institutional, residential and vacant air-rights parcels
Projects Proposed/ Underway:	none
Key Issues:	- economic costs of air-rights development over the Turnpike should be evaluated against Back Bay commercial and neighborhood needs - new building scale should relate to Massachusetts Avenue and Newbury Street



The remaining section of Boylston Street is zoned for business use but at a limited density. On the north side, from Hereford to Massachusetts Avenue, a B-4 zoning designation was increased from B-2 in 1971 to provide for additional development. At the corner of Hereford, distinctive arched-front buildings house a city fire station, a museum, and a small restaurant. These buildings are isolated, however, because they are the only structures along the street, followed only by open space above the Massachusetts Turnpike property and an MBTA passageway (partially below grade). Key questions here are what scale new development constructed over Turnpike air-rights should take, and how economic considerations should affect public policy in developing this area.

The area on the south side of Boylston, extending down Dalton to Scotia, St. Cecilia, and Belvedere Streets to Massachusetts Avenue, gives a similar isolated impression with no ground floor use or building frontage on Boylston. Except for the movie complex fronting Dalton Street and the Berklee complex (formerly the Sherry Biltmore Hotel), there is open space, railroad tracks and Turnpike land. This area is designated a B-2 zone.

Development decisions in these two areas of upper Boylston Street hinge on the use of air-rights and also depend on the rehabilitation and expansion of the Prudential Complex and Hynes Auditorium. These economic factors should be considered within the context of the Back Bay's commercial and neighborhood needs.

o Park Square Building

Number of Blocks: 1

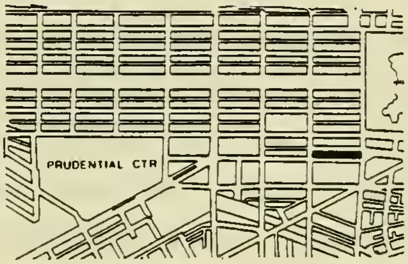
Existing Floor Area: 386,000 s.f.

Potential Build-Out: maximum build-out has been reached

Existing Zoning: B-10

Height: 125 feet

Types of Uses: ground floor retail, upper floor offices



- replacement of the upper parapet in a manner consistent with the skyline
- shadow impacts on Boylston Street created by any proposed addition

To the rear of Boylston Street's Arlington-Berkeley block is the eleven-story Park Square Building, lying between Providence Street and St. James Avenue.

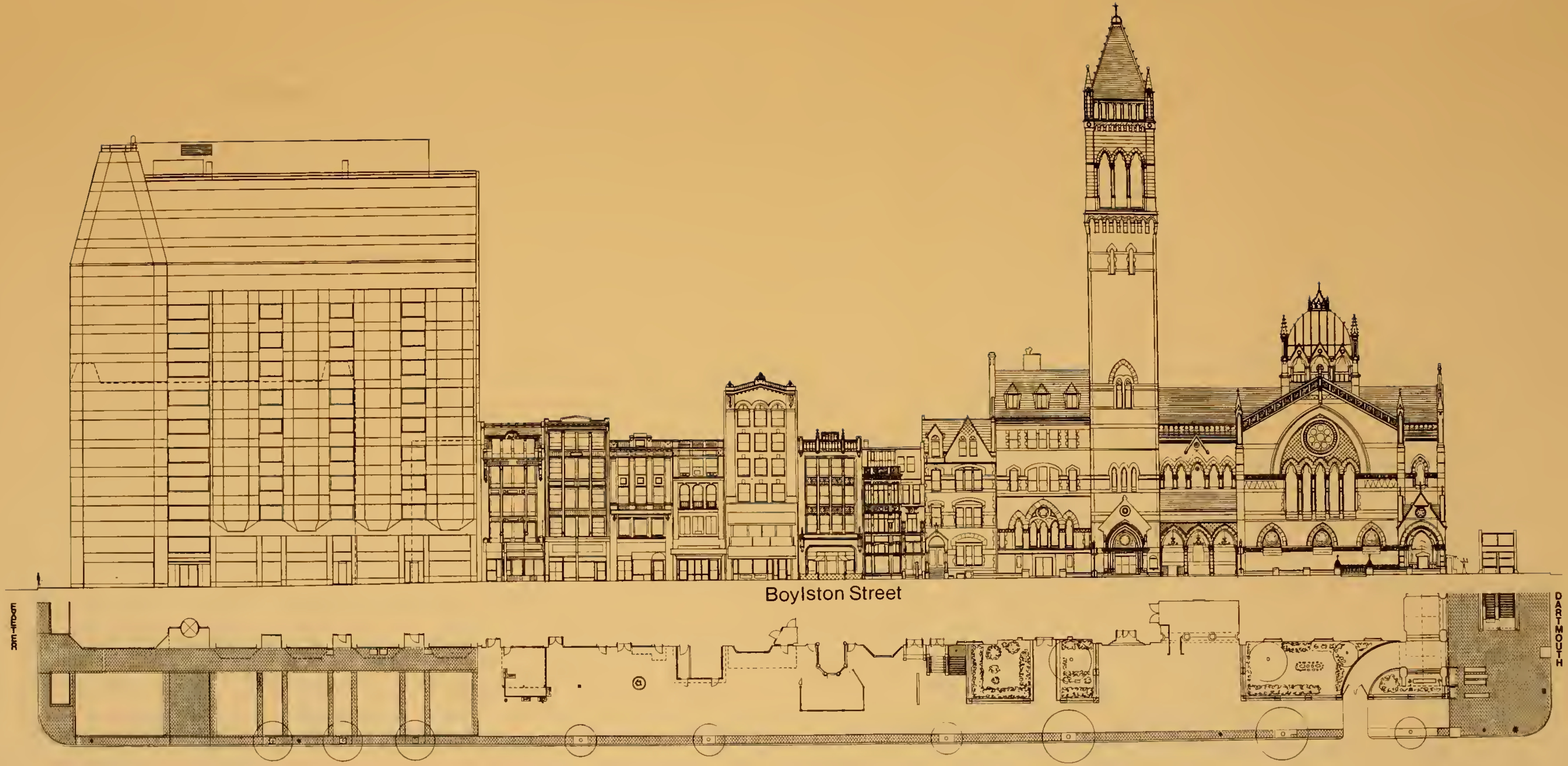
This block is located in a B-10 zone, which includes the southwest corner of Arlington and Boylston Streets as well as most of the Park Square area to the east. The block is similar to others in the area in that the ground floor is devoted to retail uses, including women's apparel, jewelry and drug stores, and some service activities. Most shops, however, open into the interior of the building. Because of its deteriorating condition, the extremely tall (12 feet) parapet was removed from the building last year. Efforts to regain that height are under consideration.

DESIGN ANALYSIS OF EXISTING BUILDINGS

Boylston Street's unique architectural character is achieved through an extensive line of masonry buildings of similar bay width, scale, proportion, color, and texture. Modest variations in height between older buildings confirm this well-established rhythm. With the exception of many severely altered storefronts and the intrusion of a few recent structures, the individual buildings are subordinate to the continuity of the street as a whole.

Almost three-quarters of the buildings in the study area were built before 1920, and their designs were governed by simple, long-established mathematical proportioning systems which produced facades that are unified and pleasing. These ordering systems tied building components together and related buildings to each other, thereby providing richness and variety within a tightly structured overall framework.

To understand how these separate buildings were designed and successfully integrated into a larger context, two model blocks were selected for detailed study. The series of buildings on the north side of Boylston Street between Clarendon and Exeter Streets (see fold-outs) represent four development periods: (1) the Victorian Period (1860-1880); (2) the Beaux Arts Period (1880-1920); (3) the Modern Period (1920-1970); and (4) the Post-Modern Period (1970-present). The buildings range from landmark importance (the New Old South Church) to the intricate terra cotta styles (653 Boylston) to new buildings built to present zoning limits.

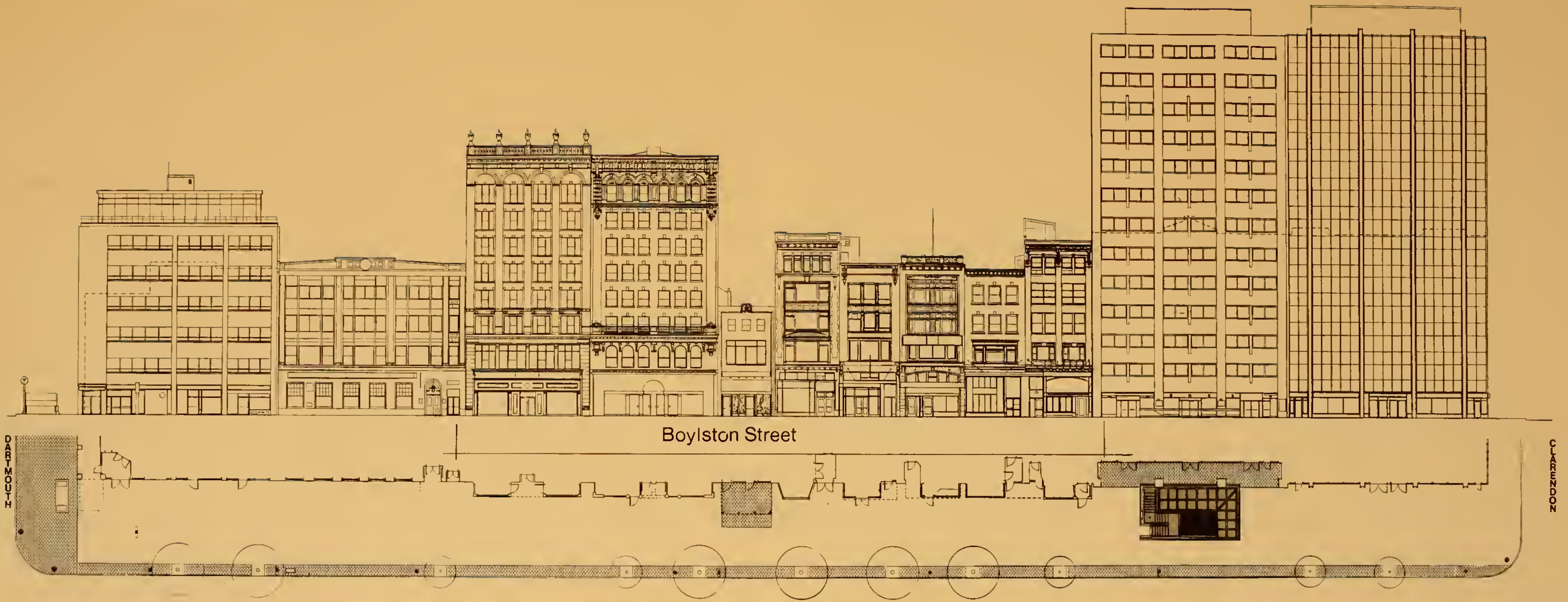


ADDRESS	676-91	671-73	667-69	666	661	667	653	647	645	635	N.A.
CONSTRUCTION DATE	1984							1886	1674-67	1674-87, 1932	1969
ARCHITECT	JUNG-BRANNEN							G.W.LEWIS		CUMMINGS & SEARS	
USE CLASS	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	EXEMPT - RELIGIOUS	MBTA
BASE USAGE		Yenching Palace Restaurant	Araby Rug Galleries	Gallery in the Square	Underground Camera	Time Zone 1 Hour Photo	Annie B Restaurant	Kennedy Studio	Old South Rectory		Green Line 'Copley' stop
F.A.R.	9.8	3.5	3.4	3.1	2.9	4.0	2.0	2.6	2.9	2.3	
HEIGHT	155' (Mechanical Penthouse 171')	60'	60'	53'	53'	74'	53'	50'	60'	60' (Vanes) (Tower 216')	16'
FRONTAGE	160'	24'	24'	24'	22'	26'	24'	26'	25'	173'	
LOT AREA	17,920	2688	2688	2688	2464	2912	2688	2912	2600	19,376	
FLOOR AREA	175,600	9400	9090	8260	7225	11,610	5270	7460	8220	44,100	
# STORIES	14	5	5	4B/18	4B/2B	6	4	4	4B	Vanes 1 - 5	1
LANDMARKS EVALUATION SYSTEM RATING 1 - 6 (High - Low) 7: Unrated	7	4	4	4	4	4	3	3	1	1	
NOTES	One Exeter Place Cement lions of previous 'Kensington' building now in front of Copley Plaza							'Bachrach' building		'Old South Church' Old South Church congregation est. 1669 (Third Church in Boston). Moved from corner Milk and Washington Streets to present site in 1675.	

BLOCK AVERAGES: HEIGHT 88' (was 61') FRONTAGE 53' F.A.R. (Two Ways) 3.6 - 5.6

Note F.A.R., Height, and Floor Areas approximate

SCALE 1 Inch . 16 feet July 1984



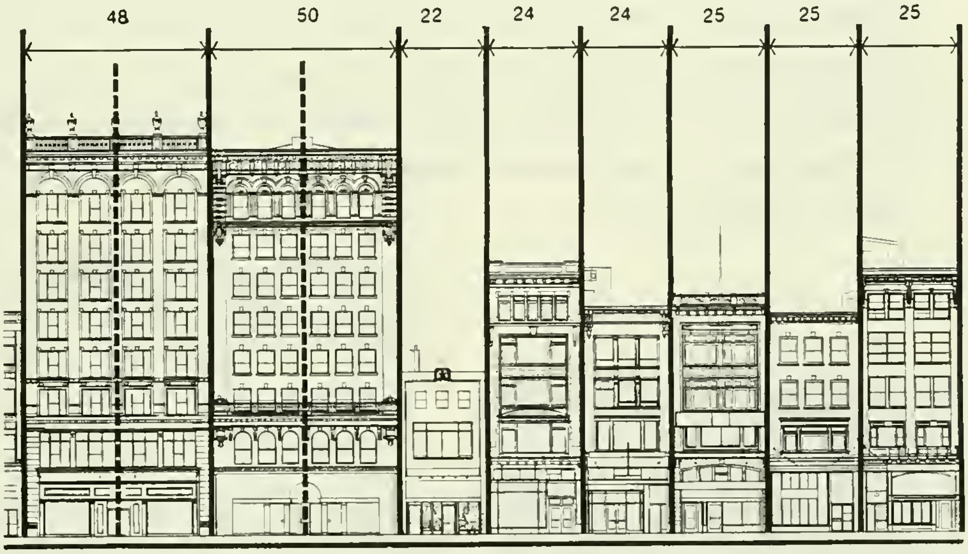
ADDRESS	601-07	585-91	579-83	571-75	569	565-7	561	557	553	551	543-47	535-41	
CONSTRUCTION DATE	1959	ca. 1915	1912	1914	1915	1873	1877	1878, 1924	1878	1877	1969-72	1963	
ARCHITECT	GOLDBERG, NEYGRESH & KENDALL		C.H.BLACKHALL			N.BRADLEY					ARCHITECTURAL CONCEPTS & PLANNING, INC.		
USE CLASS	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	PART. EXEMPT	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	COMMERCIAL	
BASE USAGE	Mutual Bank - Barnes & Noble - David P Ehrlich	State Street Bank & Trust Co.	Copley Flair - 1st American Bank	BayBank/Boston Workingmen's Cooperative Bank	Greenhouse	Back Bay Bistro	Clarendon Wines	Snyder's A/N (out)	The Corn Popper	Montilio's	Command Performance - The Office Store - Fotomat By George Restaurant	Christian Science Reading Room - U.S.Trust Co.	
F.A.R.	4.3	3.1	5.0	4.8	2.1	2.6	2.9	3.3	2.2	3.5	9.8	9.1	
HEIGHT	86'	58'	104'	101'	42'	70'	58'	62'	57'	68'	149' (Mechanical 159')	149' (Mechanical 160')	
FRONTAGE	78'	72'	48'	50'	22'	24'	24'	25'	25'	25'	75'	60'	
LOT AREA	8736	8064	5376	5600	2464	2688	2688	2800	2800	2800	8400	8960	
FLOOR AREA	37,270	25,260	26,920	26,680	5325	6825	7760	9240	6250	9820	82,110	81,330	
# STORIES	7	4B	8	8B	3	5/3	4B/3	4B	4/1B	5B	13B	13	
LANDMARKS EVALUATION SYSTEM RATING 1 - 6 (High - Low) 7: Unrated	6	5	4	3	5	4	4	4	4	4	6	6	
NOTES	McGraw-Hill Building	Chauncy Hall Building	Wesleyan Building	Abbey Building Recently renovated		Community Church of Boston						The Chase Building	

BLOCK AVERAGES HEIGHT 96' (was 75') FRONTAGE 46' F.A.R. (Two Ways) 4.4 - 6.2

Note F.A.R., Height, and Floor Areas approximate.

SCALE 1 Inch : 18 feet July 1984

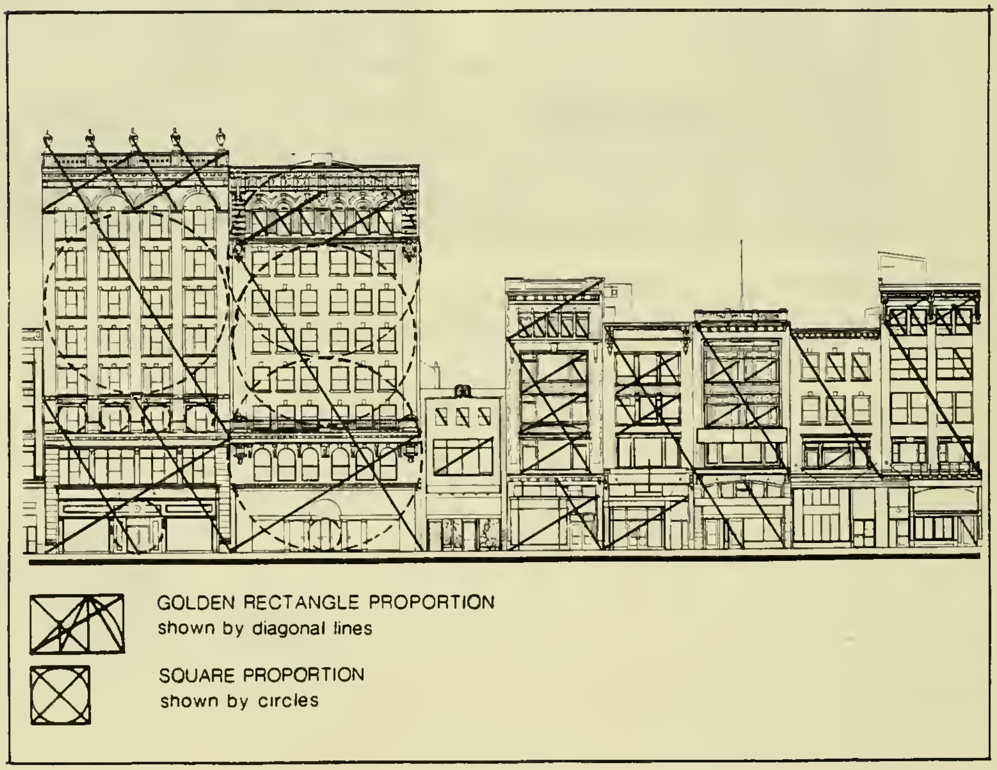
- The Basic Building Module. The standard lot size along Boylston Street is approximately 25 feet wide, with larger parcels being multiples of this number. This basic dimension, repeated along the length of each block, establishes a well-defined rhythm that became the theme of the entire street. For example, New Old South Church is a large building, yet it is consistent with the rhythm along the street because its facade is subdivided into five distinctly different compositions.



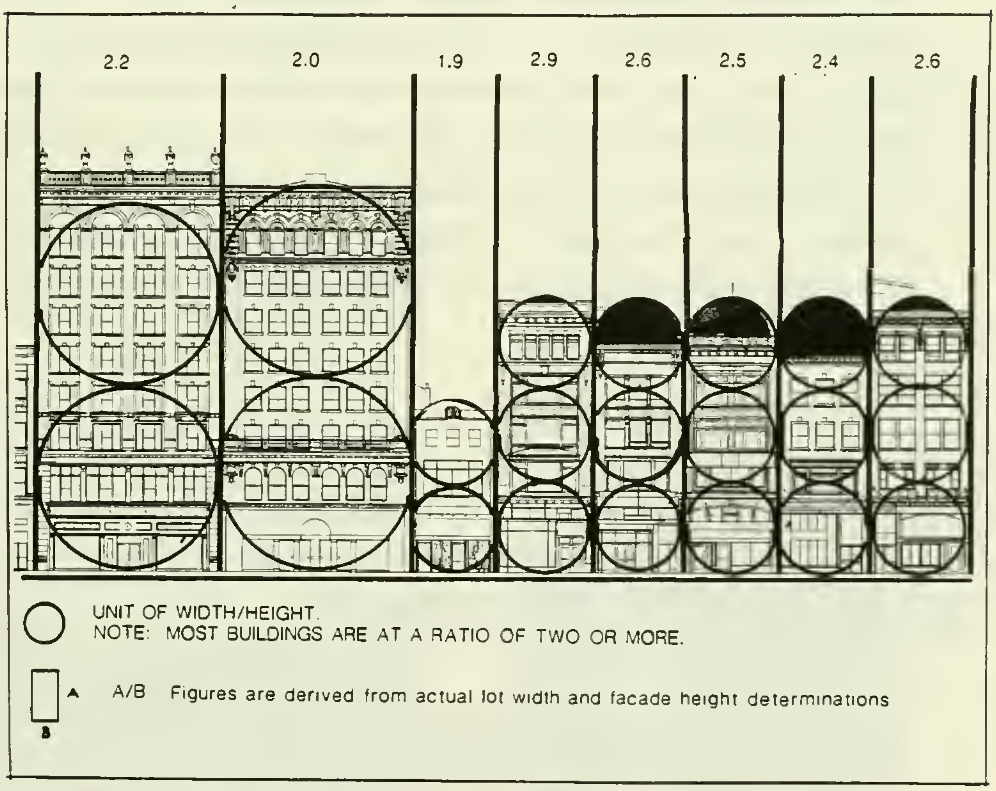
BUILDING MODULE (STREET RHYTHM)

Property Of
BOSTON REDEVELOPMENT AUTHORITY
Library

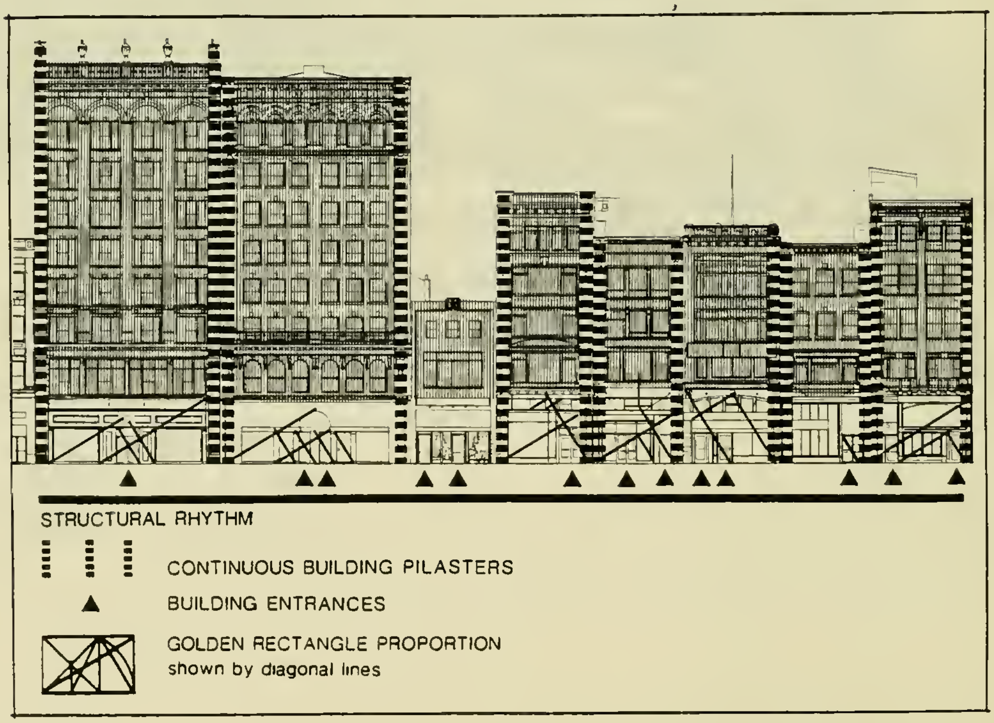
- Classic Proportioning Systems. Early Greek builders were fascinated by the chambered nautilus. The spiraling unity of this ancient shell was based on a mathematical ratio that related each component to the whole. The architects for the older buildings on Boylston Street used the "Golden Rectangle," developed by the Greeks from the proportions of the chambered nautilus. This became the ordering device that helped them develop unified and harmonious facades. Unfortunately architects for newer buildings have, for the most part, neglected proportioning systems. In addition, new buildings often took many small parcels in order to have larger, clear open spans to meet perceived office market demands. Together these two factors have produced awkward and obtrusive structures that overwhelm the smaller adjacent buildings and visibly disrupt the cohesiveness, texture, and pedestrian scale of the street.



- Base to Height Ratio. A common ratio of 2.4 to 2.9 between the base and the height was found to exist among buildings from the early development period. Buildings from the Beaux Arts Period had a ratio of 2.0 to 2.3. This consistent facade proportion is reinforced by the classic proportioning systems used to design buildings. A horizontal golden rectangle is very commonly used for the storefront zone, with a vertical rectangle used to establish the upper cornice. In addition, individual windows and groups of windows are frequently designed using golden rectangles as well.

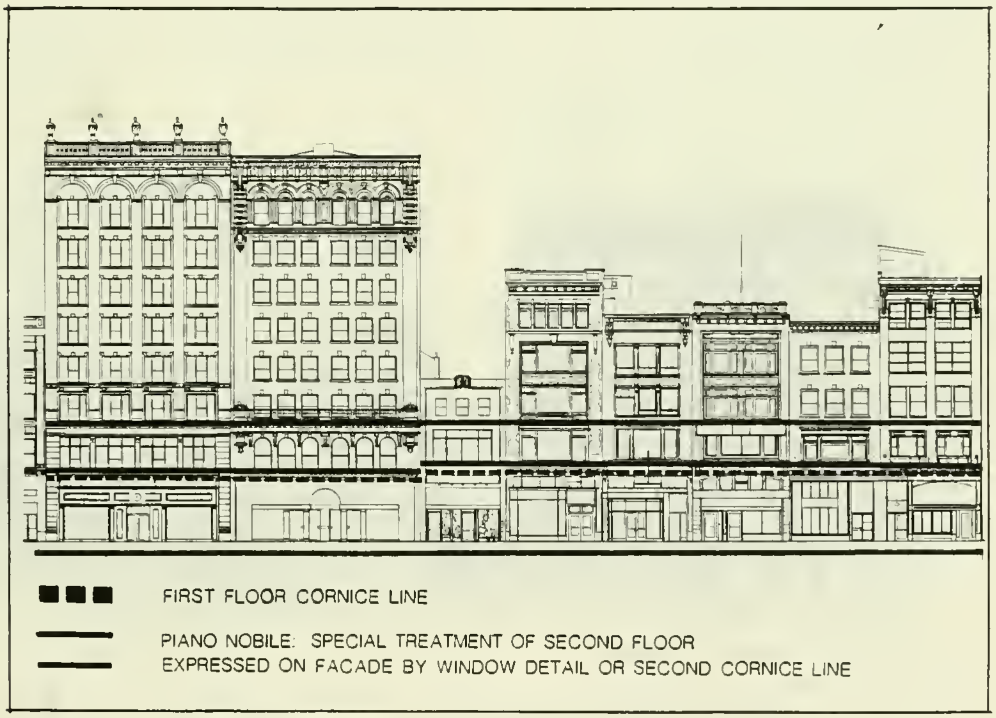

2.2
2.0
1.9
2.9
2.6
2.5
2.4
2.6
UNIT OF WIDTH/HEIGHT.
NOTE: MOST BUILDINGS ARE AT A RATIO OF TWO OR MORE.
A
B
A/B Figures are derived from actual lot width and facade height determinations

o Structural and Storefront Rhythms. Few of the original storefronts containing large glass panels, display windows, and recessed double doors with transoms have survived. These storefronts were composed of horizontal and vertical members framed by side pilasters that extended the full height of the building. Early structural systems required the pilasters and heavy load bearing walls. Later Beaux Arts buildings with steel frames continued to express these structural elements. This carefully proportioned first floor assemblage was then capped off with a pronounced cornice that served as fascia and signboard. Such an approach to storefront design produced a doorway every twenty-five feet and provided substantial activity along the street. New buildings on Boylston that are several bays wide generally contain only one door, which becomes lost in a large, two story high expanse of glass and metal. As a result, access is restricted and the established rhythm and variation of the sidewalk are disrupted. Except for sidewalk cafes, additions encroach and intrude upon the wide Boylston Street sidewalk.

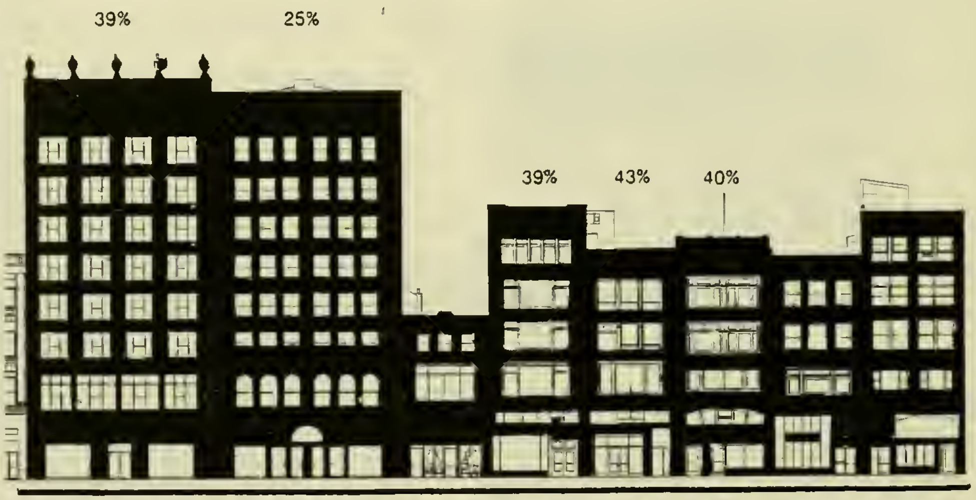


- o <ins></ins>First Floor Cornice Line. Behind extensive alterations and signs, the older Boylston Street buildings have strong cornice lines that separate ground floor commercial space from the upper floors. This important architectural feature enhances pedestrian scale and, in some of the older buildings, is reinforced through the use of a piano nobile or a distinctive design treatment for the second story that further articulates and enhances the facade.

  Although the storefront at 571 Boylston is a recent change which does not reflect the original design, the piano nobile is very much intact and an excellent example from the Beaux Arts Period.


■■■ FIRST FLOOR CORNICE LINE
━━ PIANO NOBILE: SPECIAL TREATMENT OF SECOND FLOOR
━━ EXPRESSED ON FACADE BY WINDOW DETAIL OR SECOND CORNICE LINE

- Ratio of Solid to Void in the Upper Facade. During the Victorian era, architects were fascinated with the design possibilities of large panes of glass. Buildings built between 1860 and 1880 had large windows and often a filigree framework accentuated by the detail of pressed tin spandrels. Building facades in upper floors were composed of 40 to 50 percent void or glass areas. The intricate spandrels detail often increased the light appearance of the facades. Later Beaux Arts buildings (1880 to 1920) were generally taller, and window spacing created only 25 to 40 percent void or glass areas within the upper facade. Several of the newer buildings on Boylston Street have continuous window bands that are not in keeping with the traditional solid-to-void ratio and window pattern characteristics.



SOLID TO VOID RELATIONSHIP

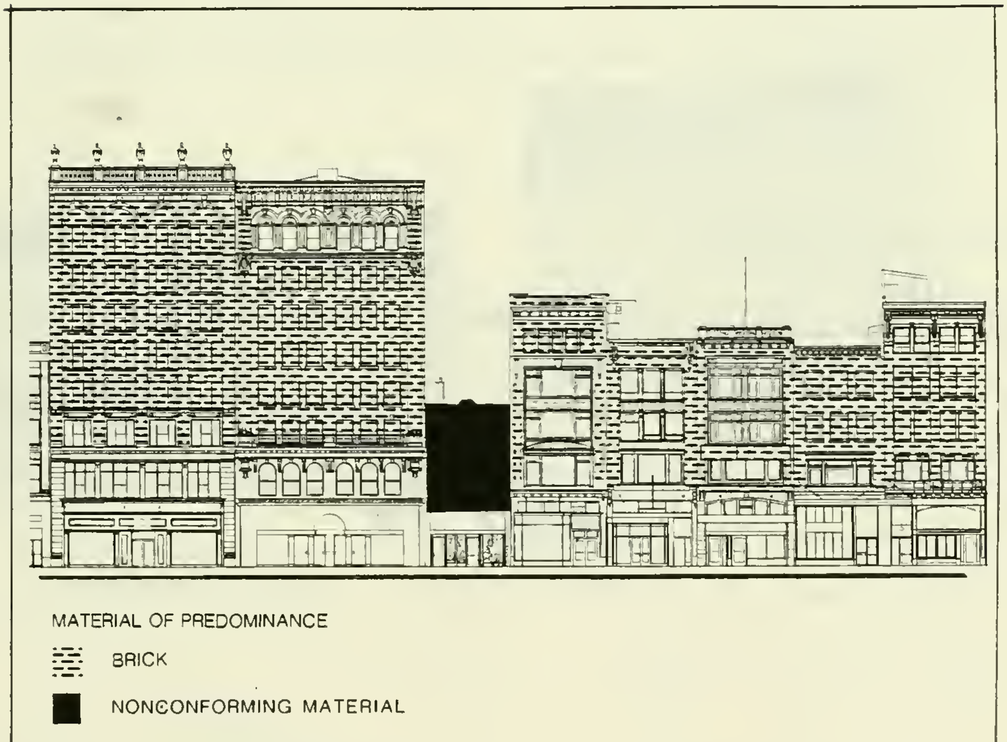
■ SOLID

□ VOID (TRANSPARENCY OR REFLECTION)

Figures are the % Void on the facade for some representative buildings.

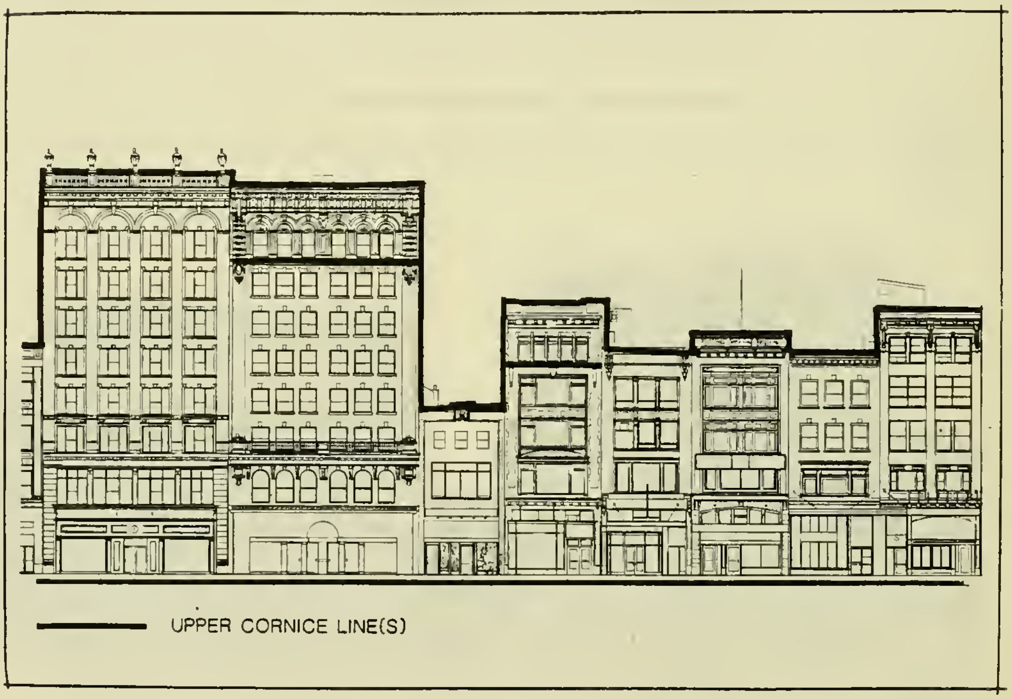
- Materials. Building materials employed by nineteenth-century architects, while surprisingly limited to light granite, limestone, brick and terra cotta contribute to Boylston Street's interest and energy. Pressed metal pediments, cornices, balustrades, spandrels and oriels, coupled with a small amount of ironwork and a modest window selection, combine to provide subtle variations of color and texture. This method is consistent with and reinforces nineteenth-century themes.

  As a result, each building facade along Boylston Street retains its own identity while simultaneously engaging in an integral relationship with the whole.



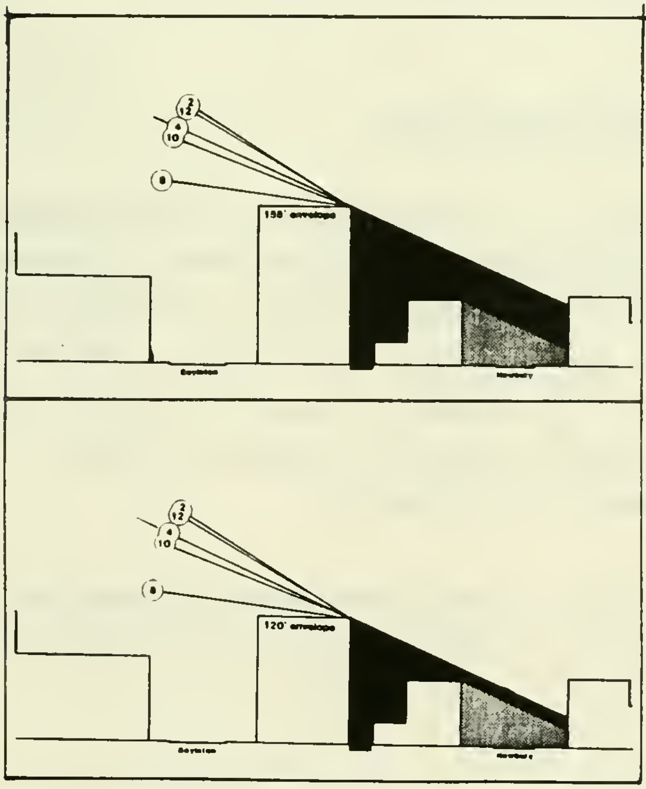
Note: Base, bays, and Cornices contain many materials characteristic of each part, such as granite, marble, limestone, terra cotta, pressed metal, and wood

- Upper Cornice Lines. Except for a few structures built after 1960, all buildings on Boylston Street have distinctive upper cornices. Many buildings have elaborate top floor cornices that are compositions of small "golden rectangles." Balustrades, urns, and pilasters are used to extend the building to meet the sky. Material changes are also used to make the building seem taller. For example, a brick building may change to marble or combinations of marble and brick to accentuate height. Top floor windows may be arched or elongated to create grand interior spaces.



- Shadows. Large developments add significant shadows to the Back Bay. Newbury Street, one of Boston's best known shopping areas, has been adversely affected by new development on Boylston Street. Shadows become a critical problem in the months between September and March. Shadow profile studies have shown that when the allowable building height on Boylston Street is reduced to under 120 feet, the shadows on Newbury Street's sidewalks, especially during lunch hours in the winter months, are minimal. (See Appendix IV for additional Shadow Profile Studies).

  Under current zoning regulations building heights are measured to the top of the parapet and do not include mechanical equipment spaces. These large, bulky structures can add an additional 20 feet to the overall height of a building and cause serious shadow problems on Newbury Street.



NOVEMBER 21 / JANUARY 21

■ New Shadow

▨ Existing Shadow

SCALE: approx. 1" : 150' 0"

ARCHITECTURAL AND HISTORICAL PRESERVATION SURVEY

As part of this study, the Boston Landmarks Commission (BLC) staff has completed an evaluation of almost all structures along Boylston Street within the study area. This special survey reveals additional insights about the distinctive architecture along Boylston Street (see fold-out). The survey establishes a methodology to distinguish between buildings of greater significance and those less noteworthy. This special survey is part of a city-wide effort to identify, research, and evaluate structures, sites, and districts which are significant to the city and its neighborhoods. The BLC uses an evaluation system with categories ranging from highest significance (I) to non-contributing (VI) in ranking buildings according to their historical and architectural significance. The Boylston Street survey completed by the Landmarks Commission in the Fall of 1984 inventoried ninety-two buildings. Survey findings are summarized in Figure 1. (For a full description of the methodology and rankings of buildings see Appendices V and VI).

Findings of the Boylston Street Survey

A major finding of this survey is that Boylston Street buildings are historically and architecturally more significant when viewed in context. Architectural historians and urban professionals refer to this approach as the tout ensemble: the whole is greater than the sum of its parts.* This concept is viable and has been used to establish historic districts throughout the United States, and when necessary to defend court challenges.

The tout ensemble concept can help develop public policy leading to conservation of significant areas, especially when the district

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* See Plan and Progress for the Preservation of the Vieux Carre, 1968 (French Quarter, New Orleans).

FIGURE 1
BOYLSTON STREET ARCHITECTURAL AND HISTORICAL PRESERVATION SURVEY
BOSTON LANDMARKS COMMISSION EVALUATIONS
Fall, 1984

Boylston Street	RANKINGS*							
BLOCKS	I	II	III	IV	V	VI	Unrated	TOTAL
Arlington-Berkeley								
North Side	1	-	1	4	2	-	1	9
South Side	-	1	3	8	-	1	-	13
Berkeley-Clarendon								
North Side	1	-	-	1	-	-	-	2
South Side	-	-	1	-	2	3	1	7
Clarendon-Dartmouth								
North Side	-	-	1	6	2	1	2	12
South Side	1	-	-	-	-	-	1	2
Dartmouth-Exeter								
North Side	1	-	2	5	-	-	1	9
South Side	1	-	-	-	-	-	1**	2
Exeter-Fairfield								
North Side	-	-	3	5	1	2	-	11
South Side	-	-	1	-	-	-	2	3
Fairfield-Gloucester								
North Side	-	-	1	3	2	3	2	11
South Side	-	-	-	-	-	-	-	-
Gloucester-Hereford								
North Side	-	-	2	2	-	2	-	6
South Side	-	-	-	-	-	-	1	1
Hereford-Mass. Ave.								
North Side	-	2	-	1	-	-	-	3
South Side	-	-	-	1	-	-	-	1
TOTALS	5	3	15	36	9	12	12	92

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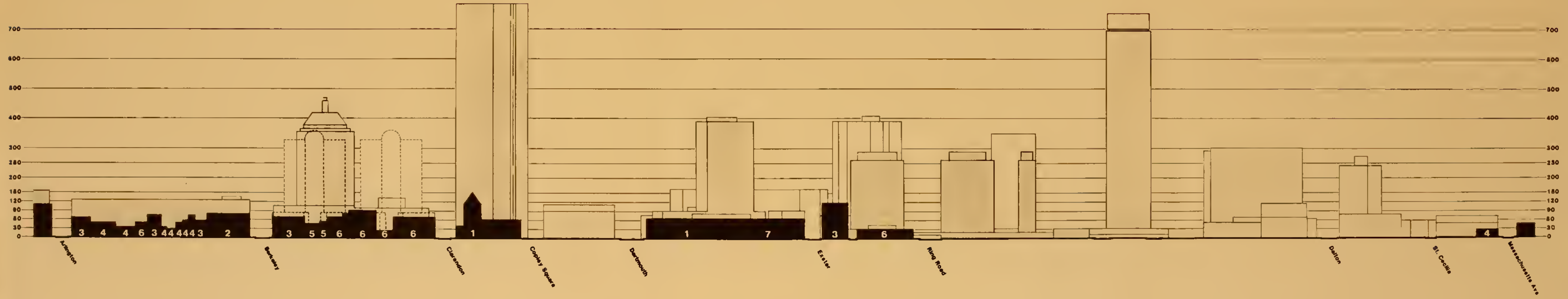
* For an explanation of Rankings see Appendix V.
** Addition to Boston Public Library unranked.

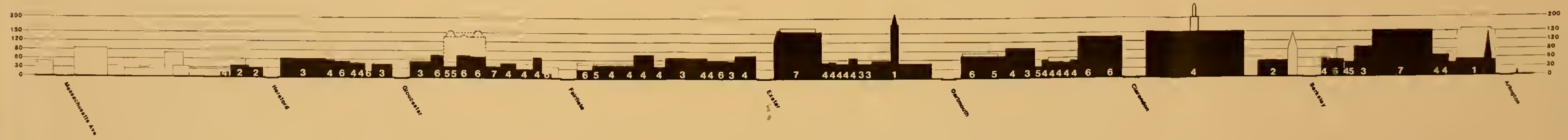
LANDMARKS EVALUATION SYSTEM KEY

- **1** Highest Significance
- **2** Major Significance
- **3** Significant
- **4** Notable
- **5** Minor
- **6** Non-Contributing
- **7** Unrated

BOYLSTON STREET SOUTH



BOYLSTON STREET NORTH



as a whole has major historical and architectural significance. That the tout ensemble concept is most applicable to the Boylston Street area becomes evident from the discussion below.

When Bostonians describe the Back Bay, they usually refer to the late Victorian residential structures or to the shopping areas. Boylston Street, however, is not always identified with its architectural and historical resources, as is Copley Square or the residential district (as in Bunting's Houses of Boston's Back Bay). In fact, turn of the century urban commercial architecture of the vernacular type which characterizes Boylston Street remains little studied by architectural historians. A popular nomenclature for commercial styles (Greek Revival, French Mansard, etc.) may be inappropriate because Boylston Street architects used various eclectic design sources.

The buildings remaining from Boylston Street's earlier (19th century) periods are the famous monumental institutional structures (churches, library) and the rows of residential brownstones with expanded storefronts. These buildings are all located in the eastern blocks of Boylston Street. Less tangible, yet important in defining urban characteristics along the street, are the prevailing single lot (25 feet) or double lot (50 feet) parcels. The collective imprint of these parcels reflects the original layout, and is a hallmark, of the Back Bay. (See Appendix VII for a more detailed discussion of Back Bay's historical development periods.)

Over half of Boylston Street's buildings were constructed in the three decades following the turn of the century. Within this group of fifty-eight buildings there are three major types: (1) six to eight-story, revival style masonry structures with traditional windows; (2) six to eight-story, Beaux Arts style, terra cotta clad structures revealing ample proportions of glazing in ornamental frames; and (3) four to six-story, smaller pier and spandrel buildings with distinct decorative features, chiefly terra

Examples of Buildings Along Boylston Street

New Old South Church

400-402 Boylston Street

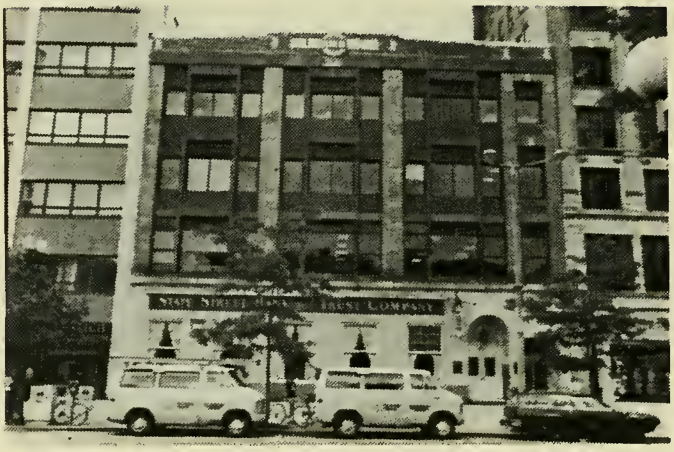
cotta or pressed metal at the windows and cornice line. In addition, this construction period also includes two story buildings with glazed storefronts.

These fifty-eight structures predominate and give character to the street. When observed together, they provide a scale which is subordinate to the well known landmark buildings. The buildings together establish an important hierarchy on the street. While the steeples, towers, and roof shapes of the landmarks are prominent, these early twentieth-century buildings provide an attractive context, with narrow ranges in height and scale, and individual details which are striking.

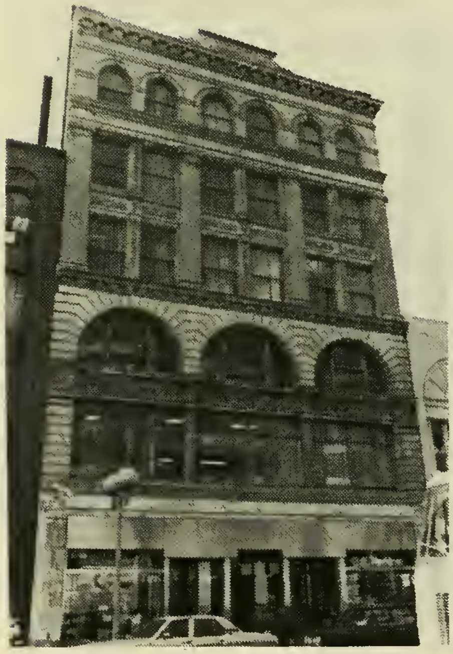
Of the remaining buildings, thirty-four were built after 1930, during the modern period. Some are in scale with the rest of the street, but are without architectural distinction. Others are radically different in overall scale or height from the earlier structures, and detract from the natural progession of the street's hierarchy as well as from the scale established by more humble commercial buildings of earlier origin.

The preponderance of buildings rank in Groups III or IV, significant and notable, respectively. Individually the buildings in these rankings have architectural distinction because of materials, craftsmanship, or detailing. Collectively these buildings are integral parts of a visually cohesive Boylston Street streetscape.

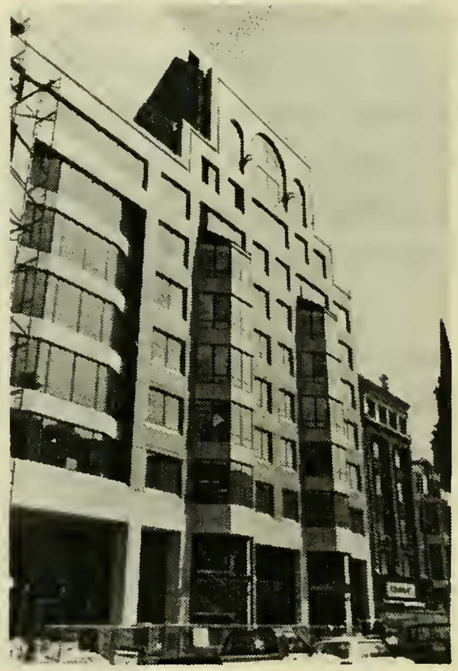
Examples of Buildings Along Boylston Street



585-591 Boylston Street



376 Boylston Street



399 Boylston Street

TRAFFIC AND PARKING ANALYSIS

Traffic and parking conditions are major concerns of the Back Bay community. Congestion, noise and air pollution caused by traffic, along with constraints on pedestrian movement, are evident in the Boylston Street corridor and other Back Bay locations. Parking is scarce for residents, employees, shoppers, and visitors. The community is generally concerned that a significant amount of additional development, particularly for office uses which generate higher levels of peak hour traffic, may cause further deterioration in traffic and parking conditions.

A review of traffic volumes on Back Bay streets, however, does not totally support this concern. Over the last decade Back Bay traffic volumes have not grown to the same extent as traffic in downtown Boston, particularly on major arterial roadways. Comparison of 1972 and 1982 downtown Cordon Count information, along with supporting data, indicate that the average A.M. peak entering volumes increased by about 6% over the 10-year period, while average P.M. peak exiting volumes actually declined. The respective values for downtown Boston are increases of 21% and 7%.

During peak hours, however, areas of chronic congestion are evident on many streets, including Boylston. Proposed developments will add to this congestion. Environmental Impact Reports (EIR's) for proposed developments indicate that at a number of intersections, future traffic demand will exceed capacity, so that flow breakdown and substantial queuing of traffic will likely occur.

However, a favorable transportation change in the Back Bay will be the opening of Southwest Corridor rail service in 1987. This change includes the relocation of the Orange Line to serve Back Bay and a reconstruction of commuter and intercity rail service which, except for a South Station shuttle, has been virtually absent during the years of Corridor construction work. After the Southwest Corridor completion, rapid transit capacity to the Back Bay (Green and Orange Lines combined) should more than double. This transit and rail expansion will provide capacity for new commercial development in the Back Bay. The addition of this new transit capacity may be a major factor creating new development pressure in the area.

Scale of Transportation Issues

If build-out occurred to the full extent permitted under existing zoning, future development in the Boylston Street study area would more than double the existing floor area, an increase of two million square feet.* This, in turn, could increase Back Bay traffic by over 25%, entailing over 1800 vehicle trips in the peak hour, and if concentrated at one point, requiring at least five lanes of traffic. This is a worst case scenario. Full build-out may not be feasible, and if feasible, would occur over a period of years during which arterial or local street improvements resulting in an increase in actual capacity. Capacity increases by the transit system would also provide an incentive not to drive.

The volume of general traffic on a street can be viewed relative to contributions from different land uses and types of traffic (local vs. through). Parking supply and demand, however, are more site-oriented. The parking demand for the study area is either met on-street, primarily Boylston Street, or by off-street facilities located outside the study area. Considering that the area configuration, dimensions of land parcels, and ground floor design criteria are not conducive to creating off-street parking, future development may encounter difficulties satisfying its parking demands on site or even outside the study area.

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* Excludes Prudential Center and Hynes Auditorium expansions and St. James Avenue Garage Redevelopment (500 Boylston Street).

Relationship to Land Use and Zoning

From a traffic and parking viewpoint, existing conditions indicate the need to limit future development, to slow traffic growth, and to reduce parking demand. Other measures may be taken to slow traffic growth beyond control of floor/area ratios. For example, office uses generate three to five times more peak hour trips than residential uses. From a traffic point of view, a higher FAR may be permitted for residential rather than office uses since the former generates fewer peak hour trips. In terms of parking demand, however, the relative benefits of residential over office uses are not as evident.

The table below characterizes levels of activity which may result from build-out under existing zoning and from down zoned floor/area ratios of 8.0 and 6.0. Note that the calculations are for office use only, and that increases in activity would not be focused in one geographic location.

Build-Out	Increase in Floor Area (Sq.Ft.)	Daily Vehicle Arrivals	New Parking Space Demand	New Daily Pedestrian Arrivals
Existing Zoning	2.0 million*	3,600	2,000	14,000
FAR 8.0	1.6 million	2,900	1,600	11,200
FAR 6.0	1.2 million	2,200	1,200	8,400

These estimates show that build-out under existing zoning represents a sizeable addition of people, vehicles, and parking demand to the area, which would be reduced by lowering allowable FAR's.

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* Excludes Prudential Center, Hynes Auditorium and 500 Boylston Street.

Some general conclusions regarding the transportation aspects of zoning controls in the study area can be drawn from the foregoing discussion. These are:

- Down zoning the study area to reduce density would restrain future traffic growth and parking demand;
- Residential development brings fewer cars than office or retail uses, and is therefore preferable from a traffic and parking perspective;
- Future parking demand from the study area will have to be satisfied to a considerable extent outside the immediate study area;
- Existing and expected new transit facilities are extremely important in reducing demand for on-street and off-street parking spaces;
- Safe, convenient, and pleasant pedestrian links between transit stations and Back Bay activity centers are fundamental to reducing automobile use in the Back Bay commercial area;
- Intersections experiencing chronic congestion during peak hours should be carefully studied. Some intersections may be improved through technical change (i.e., traffic signal changes, no parking lanes, better lighting). Others may require changes in the area-wide circulation system.

ECONOMIC ANALYSIS

A key issue in zoning changes involves the economic consequences of altering the floor area ratio (FAR) and/or the uses permitted under zoning controls. The analysis which follows examines the economic feasibility of altering the FAR in the study area.*

o The Existing Building Benchmark

This effort begins by constructing a hypothetical case study to assess the economic attractiveness of retaining of an existing building site on Boylston Street, based on 1985 economic factors. The analysis focuses on a four-story building containing 7,984 gross square feet (GSF) of floor area on a lot of 2,800 land square feet (LSF) and with a 2.8 FAR.** The building is handsome but not of landmark stature, and thus, not worthy of any special protection.

The objective is to identify a neutral FAR, one which neither threatens nor protects the property. Having determined this threshold, public and private decision-makers may affect the future of properties like the one at hand by raising or lowering the allowable FAR. Doing so will encourage either the retention or redevelopment of the site.

To arrive at a benchmark value for the existing hypothetical building, a capitalized value based on the rental income in the area was estimated and then divided by the size of the lot. This capitalized value per land square foot was calculated at $309; values below this amount encourage the retention of the existing use, while higher values encourage redevelopment.

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* The Tables accompanying this section are found in Appendix VIII.

** GSF refers to the square footage of a particular building, while LSF refers to the footage of the actual land parcel.

- New Construction/Commercial Use Floor Area Ratio/FAR Alternatives

A land residual analysis is used to determine the development value of alternative FARs. The analysis examines the amount of funds that would be reasonably available for land and building acquisition (the residual), given certain assumptions as to the cost of construction and anticipated rents. The presumption is made that the larger the allowable FAR, the greater the likelihood that an offer will be made and accepted to purchase the existing building. Conversely, the lower the FAR allowed, the less the residual, and the less the likelihood of offer and acceptance.

The financial assumptions used in the analysis are based on current comparables, industry standards, independent experts, and consultations with Citizens' Review Committee members. The industry standard rate of return is currently estimated to be 12.5%, the rate used in this analysis. While differences of opinion exist on a few other assumptions, these differences are not material in nature.

Building envelopes with FARs of 5, 7, 8, and 9 were examined. In each case, an estimated net operating income (NOI) was capitalized at a rate which assumed a return on the project cost to the developer that adequately covered debt service and equity return based on current market financing terms. The resulting figure represents the total development cost (TDC) that can be supported by the NOI. The difference between this supportable TDC and the actual TDC calculated in the hypothetical development pro forma was the land residual, i.e., the excess funds generated by the NOI that are available to acquire the existing property. Dividing the land residual value by the land square footage gave a dollar amount per land square foot for each development envelope or FAR.

Due to differing professional opinions about construction costs, there are two land residual values at a FAR of 5.0. Neither value, however, is sufficient to threaten the existing building. When economies of scale can be attained with hard construction costs, the larger the building the lower the cost per GSF (within certain parameters). Hence, a greater cost per GSF is expected for a smaller building such as the one studied here. Another view, however, is that when a building is 5 or 6 stories, construction cost can be decreased due to the existence of less expensive building standards (e.g., fire and safety codes, foundation loads, structural materials, elevator type). Under the higher construction cost assumption and a 5.0 FAR, there are insufficient funds left over to purchase the land; the development does not even yield the required 12.5% return -- a negative land residual is created. Under the lower construction cost assumption with a 5.0 FAR, a $190/LSF residual value makes acquisition unlikely, given that the hypothetical existing building has a residual value of $309/LSF.

At 7.0 FAR, a land residual of $164/LSF indicates there continues to be insufficient funds to cover acquisition of the existing building. At 8.0 FAR, the land residual is $288/LSF and at 9.0 FAR it reaches $468/LSF. Consequently, a developer would most likely find it feasible to offer to purchase the existing hypothetical building only when the allowable FAR reached a level between FARs of 8.0 and 9.0. Likewise, the current building owner would probably be tempted to sell as the $/LSF rose above his current capitalized value of $309/LSF.

All developers are not alike, however. Back Bay in recent years has experienced relatively more prime tenant development than speculative real estate development. Downtown Boston's Financial District and Cambridge's office district reflect the reverse. On the one hand, this is a tribute to the Back Bay since institutions will pay a premium for a Back Bay location. On the other hand, because prime tenants like John Hancock, Prudential, New England Life, and Ingalls Associates wish to retain and expand their home offices, they become captive landlords and tenants. They, therefore, may acquire property at values not entirely dictated by the customary economic criteria used by the developers of speculative office buildings.

Moreover, individual investors hold varying subjective assessments of risk and return. For example, the evaluation of the level of appreciation for any given real estate investment will affect an investor's perception of a "required" return on the total development costs.

o Renovating the Existing Building

Calculations for a renovation of our hypothetical building indicate that there is little incentive for the current property owner to renovate his property. He is more likely to retain an existing four or five-story building ($309/LSF) in its present condition rather than substantially renovate it -- or sell it to someone else to rehabilitate. The renovation option has a land residual value of only $218/LSF. Some potential incentives for renovation would include special loan programs to reduce renovation debt service costs, federal investment tax credits, and state investment tax credits.

o Residential Use Alternatives

Except for Prudential's residential towers, Boylston Street has lost the residential character it had in the 19th-century. Although predominantly a commercial street, Boylston Street has the potential for residential use above the ground floor. The development of the Four Seasons Hotel and Condominiums, and the planned Arlington/Hadassah mixed-use development on Boylston Street indicate the possibility of modifying the character of the street to include residential uses. In analyzing this possibility, two residential development options were tested, a new development at an 8 FAR and a conversion of an existing building. Both residential development options are possible alternatives for preserving the existing building, since the new construction yielded a land residual value of $326/LSF and the rehabilitation for condominiums yielded a value of $291/LSF.

- Summary and Issues

Scenario	Land Residual
Existing Hypothetical Building	$309/LSF
New Construction FAR 5 (low construction costs)	190
New Construction FAR 5 (high construction costs)	- 12
New Construction FAR 7	146
New Construction FAR 8	288
New Construction FAR 9	468
Rehabilitation of Existing Building	218
Residential FAR 8 (New)	326
Residential (Conversion)	291

The conclusions that follow should be weighed against the design, traffic, and parking concerns cited previously in the Report.

- It is a delicate task to specify exactly that threshold FAR which provides an edge to new development over existing buildings. The foregoing financial analysis seems to suggest, however, that a FAR slightly over 8 and under 9 seems to achieve the desired balance between new development and renovation. In contrast, present zoning at 10 FAR gives an edge to new development by providing a building envelope which yields a land residual in excess of the value of existing buildings.

- Whether development for institutional prime tenants predominates over speculative development in the Back Bay is a crucial issue. The institutional developer's definition of an economic decision differs from that of a speculative developer and could result in acquisition offers in excess of the residual value measures indicated in this analysis.

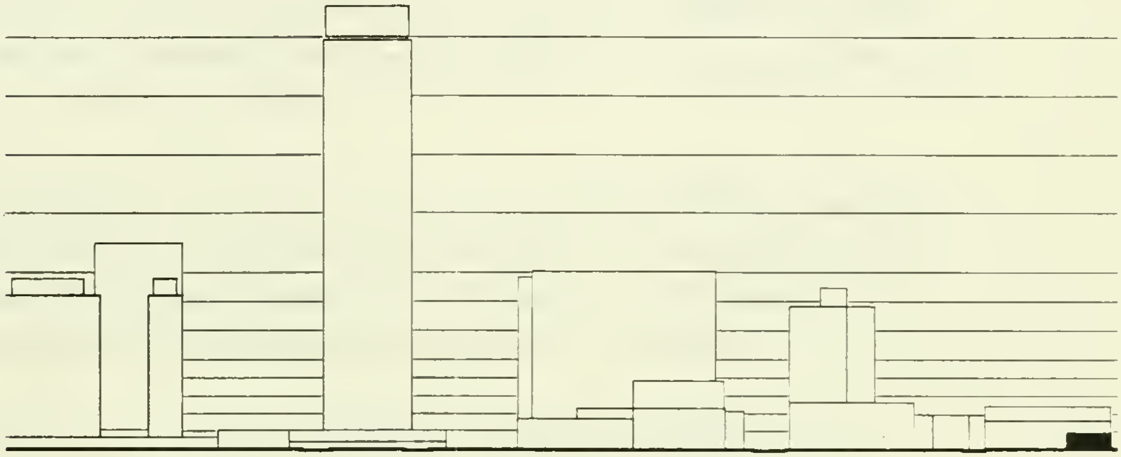
- Residential use is a viable option for Boylston Street. Based on the yield from land residual values, it appears that the retention of existing buildings for residential use may be more economically viable than their retention for commercial use. Moreover, new residential development at a FAR of 8 is also economically feasible.

Future Study

- Changes in the costs of project financing as well as changes in the tax benefits associated with renovation and new construction alternatives will create a different market and thus continue to influence the analysis.

- Studying property appreciation values will provide a better understanding of the "required rate of return" to potential developers.

RECOMMENDATIONS



II

Property Of
BOSTON REDEVELOPMENT AUTHORITY

PRELIMINARY ZONING RECOMMENDATIONS

On the basis of the studies presented in this Report, a number of zoning changes are recommended for the study area. These zoning recommendations are an integral part of the overall regulatory changes required to implement the planning proposals of this study. The recommendations are being offered for public review and comment; final recommendations will be made after the public discussion process.

By controlling the height and mass of new buildings, the zoning recommendations that follow are designed to strengthen the uniformity of Boylston Street's urban design and to promote the conservation of architecturally prominent buildings.

Lower Zoning Limits on Boylston Street's North Side

- Change to B-8-120 Designation for the Blocks between Arlington and Clarendon Streets and between Fairfield Street and Massachusetts Avenue

  The north side of Boylston Street from Arlington to Hereford Streets is currently designated a B-10-155 zone; from Hereford Street to Massachusetts Avenue a B-2 zone is in place.

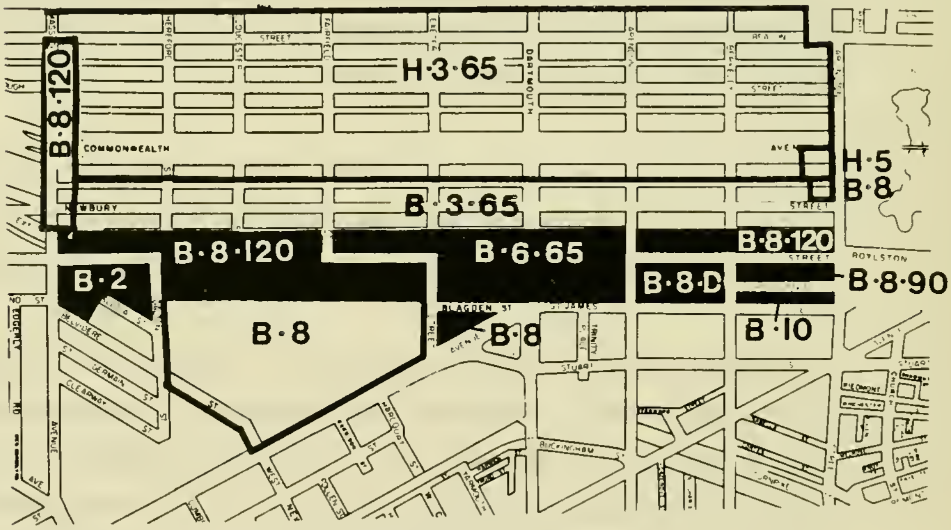
  It is recommended that a reduction in height to 120 feet and a FAR to 8.0 be considered for Boylston Street's north side blocks between Arlington and Clarendon Streets, and between Fairfield and Massachusetts Avenue. This recommendation is based on the following conclusions:

  - A height of 120 feet would allow any new infill buildings to relate more effectively to existing structures and would minimize shadow impacts on Newbury Street's north side walkways, particularly during lunch hours in the winter months.

- The B-8 FAR would conform to the existing B-8 FAR zone on Boylston Street's south side.

- A B-8-120 zone already exists on Massachusetts Avenue between Newbury and Beacon Streets, and the new zone could act as a continuation of this existing designation.

- The B-8-120 would more nearly reflect the heights of most buildings on the north side of Boylston since only a limited number of buildings were constructed to the 155 foot height allowed during the past twelve years.



Preliminary Zoning Recommendations

Additional Strategies

In addition to height and FAR reductions on Boylston Street's north side, a strategy should be developed to protect those buildings that have received a notable rating (Category IV) or better by the Boston Landmarks Commission's Survey. (See Appendix VI). Additional design guidelines should be adopted by the Back Bay Architectural Commission and the BRA as a part of this strategy.

Lower Zoning Limits Further on Both Sides of Boylston Street to Protect Copley Square's Landmark Heritage

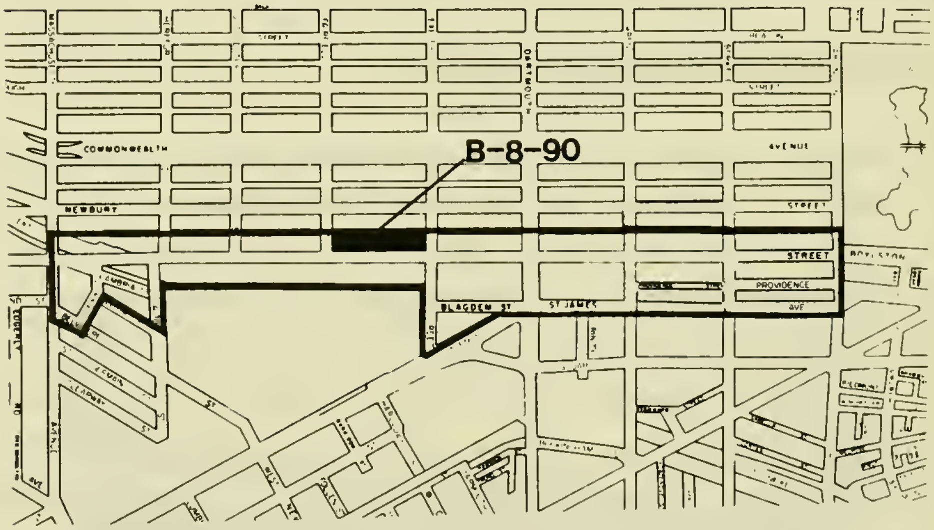
- ### Change to B-6-65 Designation

Copley Square is central to Boylston Street and the Back Bay. It is framed by four Boston landmarks: Trinity Church, New Old South Church, Boston Public Library (McKim Building), and the Copley Plaza Hotel.

The north side of Boylston Street between Clarendon and Fairfield Streets is within a B-10-155 zone. The south side of Boylston Street between Clarendon and Exeter Streets to St. James Avenue is within a B-8 zone.

It is recommended that zoning for these blocks on both sides of Boylston Street be changed to a B-6-65 designation. This new zone, with a FAR of 6.0 and a height limit of 65 feet, would limit the height and intensity of development around Copley Square. It would thus serve as a transitional zone between intensive developments, such as the John Hancock Tower and Copley Place, and the lower density Back Bay residential area. This zone would also provide an effective transition to Newbury Street, which has a zoning designation of B-3-65 (FAR 3 and height limit of 65 feet).

An alternate zoning option for the block between Exeter and Fairfield Streets on Boylston Street's north side would be a change from B-10-155 to B-8-90. Because a number of buildings close to the Fairfield corner could benefit from infill development, a greater density than permitted in a B-6-65 zone might be desirable. A B-8-90 zone would also provide for a step-up to the 120 foot height proposed for Boylston Street's Fairfield to Massachusetts Avenue blocks.



Zoning Option: B-8-90

The B-8-90 option might also be entertained if shadow impacts on Newbury Street can be minimized and if existing buildings classified as significant (Group III) by the Landmarks Commission could be retained.

Retain Existing Zoning Limits on the "Triangle Block" (Exeter-Blagden-Huntington)

For the "Triangle Block," no change in the current B-8 designation is proposed. It is, however, recommended that an architectural survey be undertaken to identify buildings worthy of preservation. Further, design guidelines should be established for this site, including the following elements:

- the Huntington Avenue frontage (including the Massachusetts Turnpike entrance) should be improved to act as a gateway to Huntington Avenue;
- public access from Huntington Avenue through the site to Boylston Street should be provided;
- heights should not cast new shadows on the Public Library courtyard; and
- ground floor retail use should be required along Huntington Avenue and Blagden Street.

Establish New Controls on Lower Boylston Street's South Side

o Establish a 90 foot height limit

The south side of Boylston Street has FAR restrictions but no height regulations. Development guidelines prepared by the city for two developments proposed in the area, however, promote design continuity by setting a cornice line height of 85-90 feet along Boylston Street. The Decorator's Building (414-426 Boylston), for example, is currently the highest building on the Arlington-Berkeley block at 87 feet. To ensure future design continuity, it is recommended that a height-to-cornice-line no greater than 90 feet be established in the Arlington-Berkeley block.

- Maintain the B-8 Zoning Designation

  The south side of Boylston Street between Arlington and Clarendon Streets is currently within a B-8 zone, except for the corner of Arlington Street which is designated B-10. The retention of the B-8 zone, in conjunction with a change at the Arlington Street corner from B-10 to B-8, is recommended to establish uniform zoning regulations on the Arlington-Berkeley block.

  The 500 Boylston Street project between Berkeley and Clarendon has been proposed for a B-8-D (Planned Development Area) zoning designation. This block maintains an 87 foot height-to-cornice-line along Boylston Street's frontage although a FAR of 9.5 is proposed overall for the development site.

Establish Height Limits on Upper Boylston Street's South Side

The Prudential Center, Hynes Auditorium and Lenox Hotel megablock between Exeter and Dalton Streets is currently within a B-8 zone. There are no specific height controls. To protect the Boylston Street frontage of this megablock to a depth of 100-150 feet, it is recommended that a 120 foot height restriction be adopted. The maintenance of this height limit along Boylston Street's south side would also provide a step-down or transitional zone to Newbury Street and the Back Bay residential area from the existing Prudential Center heights.

Establishing such a limit should help to clarify planning and design efforts for the expanded Prudential development and Hynes Auditorium. The 120 foot height limit would also generally correspond with the cornice line for the older Lenox Hotel building at the corner of the block.

A further design strategy will be required to help this megablock relate to the grid pattern of Fairfield and Gloucester Streets. Revitalizing this cross street pattern will reinforce Back Bay's existing grid pattern.

Retain Existing B-10 Zoning for the Park Square Building

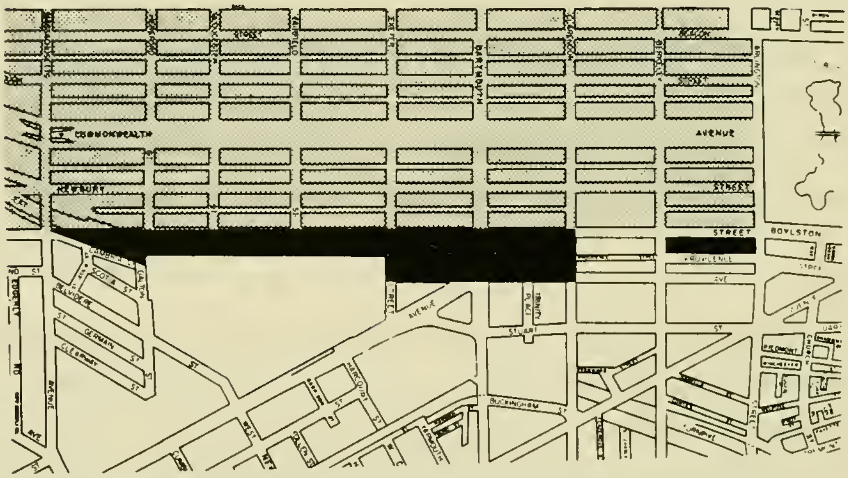
No change of zoning is being recommended at this time for the Park Square Building, which is already designated a B-10 district. A proposal to increase the height of the Park Square Building was initiated in 1984 but has not been formally presented to the city. If the city is to entertain any new proposals, visual and shadow impacts on Boylston Street must be minimal, the distinctive architectural character of the existing structure maintained, and parking impacts mitigated.

EXPANSION OF THE BACK BAY ARCHITECTURAL DISTRICT

Neighborhood and civic groups in the Back Bay suggested expanding the boundaries of the Back Bay Architectural District to the south side of Boylston Street. The present boundaries extend from the middle of Boylston Street to the Charles River between Arlington Street and Charlesgate East. The intent of such an expansion is two-fold. First, it would protect the historic and architectural assets along the southern side of Boylston Street. Second, the overall character of Boylston Street would be maintained as a whole. Two options for expanding the district are presented below.

- Lower Boylston Street South & Copley Square Expansion (Option 1)

  Expansion to Providence Street between Arlington & Berkeley, to St. James from Clarendon and Blagden to Exeter Street, to a line approximately 120' south of Boylston Street from Exeter to Dalton Street, from Dalton Street to Massachusetts Avenue along Cambria Street.

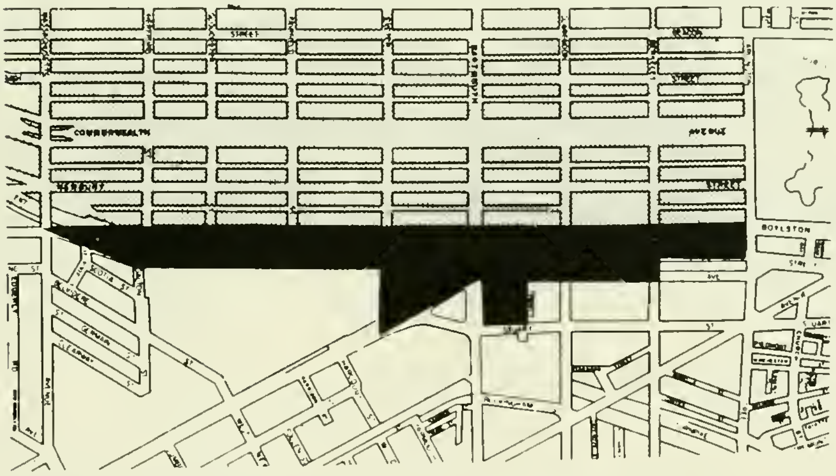


Back Bay Architectural District Expansion- Option 1

This option incorporates much of the southerly frontage of Boylston Street, and because of its impact on the Architectural District includes the Prudential Center frontage. It excludes the St. James Avenue garage redevelopment (between Berkeley & Clarendon) which will be controlled by a planned development area designation, currently pending approval from the Boston Redevelopment Authority.

- Expansion Generally Following Existing National Register Boundaries (Option 2)

Expand the district to Providence Street between Arlington & Berkeley to St. James Avenue between Berkeley Street & Trinity Place; to Stuart Street between Trinity Place & Dartmouth Street; to Huntington Avenue between Dartmouth & Exeter Streets; to the back lot line of the Hotel Lenox; and to a line approximately 120' south of Boylston Street from Exeter to Dalton Street, from Dalton Street to Massachusetts Avenue along Cambria Street.



Back Bay Architectural District Expansion– Option 2

> This expanded district parallels the existing National Register District boundaries with the exception of the Westin Hotel block. It also includes the Prudential frontage. Overall, its boundaries, parallel to the National Register District, allow for more uniform treatment on Boylston Street's south side.

These options could be implemented with special guidelines tailored for the Prudential Center frontage along Boylston Street and/or the air-rights area over the Massachusetts Turnpike west of Dalton Street. The Back Bay Architectural Commission could oversee demolitions, massing, height and coverage for this frontage, and therefore protect the adjoining architectural district from negative impacts.

NEW DESIGN AND MASSING GUIDELINES

It has long been acknowledged that the development of Boylston Street as a distinguished commercial area was largely the result of architectural controls placed on the "new lands." These original restrictions were replaced by zoning ordinances. If the architectural character of Boylston Street is to be protected, the Boston Redevelopment Authority* and the Back Bay Architectural Commission may need to adopt additional design and massing guidelines in addition to revised zoning designations. The following paragraphs suggest an approach to these guidelines which will require further public review and comment before they are formally adopted.

Proposed Guidelines

Few of the older buildings along Boylston Street are visually prominent, stylistically extravagant, irregularly shaped or substantially different in their use of materials. They are restrained and dignified. Fortunately, architects, developers, tenants, and the general public have shown increased sympathy for designs that relate to their existing context and attempt to evoke historic elements or styles. Existing older forms provide a wealth of models that readily suggest the basic design framework for new construction. To preserve the character of Boylston Street, proportional relationships, facade composition and textural qualities should be incorporated, maintained, and restored according to the following guidelines.

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* This may be done by the BRA as an extension of the Authority's Boston By Design planning efforts for the downtown.

- The Basic Building Module

  The basic design module for new construction on Boylston Street should be 25 feet. Buildings wider at the base than this amount, should subdivide their facades into modules no wider than 25 feet.

- Base to Height Ratio

  The height of any new structure should be at least twice and no more than three times the width at the base, with the maximum overall height not to exceed either 90 or 120 feet in the two proposed B-8 zones or 65 feet in the proposed B-6 zone.

- First Floor Cornice Line

  New development should have a pronounced cornice line separating the ground floor from the upper floors, which could serve as the sign band. Piano nobiles are encouraged.

- Classic Proportioning Systems

  Designs should demonstrate the use of classical proportioning systems in a manner consistent with the older buildings on the block.

- Solid to Void Ratios

  Recessed windows are desired. Strip windows are discouraged. Large, undifferentiated panes of glass are not appropriate. Expression of lintels and sills is encouraged.

- Building Materials

  Primary building materials should be masonry, including brick, marble, limestone, tile and granite. Other materials should be consistent in surface texture and color with the existing traditional materials.

- Storefront Details

  Storefronts should be sympathetic and evocative of the original design and structure. Additions extending into the sidewalk should be avoided. Store signage should be complementary to building design.

- Upper Cornice

  Upper cornices or parapets are required and should evoke, without mimicking, the traditional projecting ornamental entablatures that appear along the tops of the older buildings along Boylston Street.

- Mechanical Equipment Penthouses

  Mechanical equipment penthouses should be set back from parapets, should not exceed 15 feet in height, and should be integrated into the overall roofscape of the skyline. The following appropriate cladding materials are encouraged: copper, standing slaw metal, tile or slate.

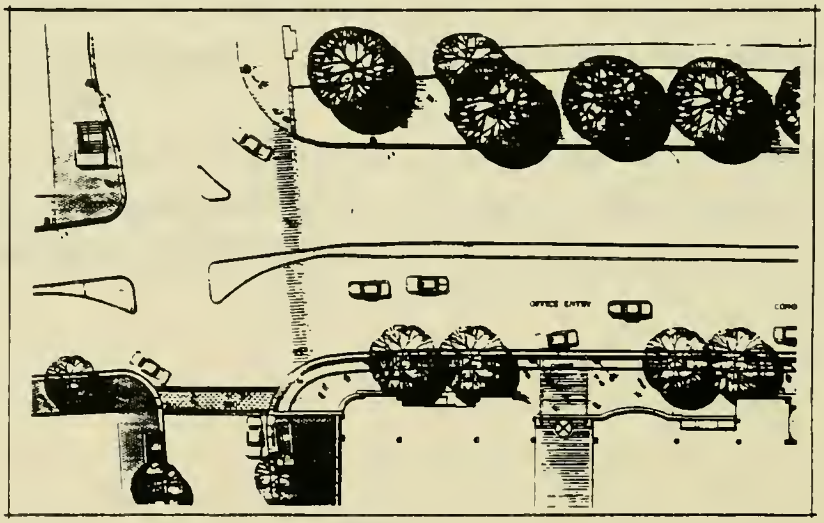
NEW PUBLIC IMPROVEMENTS

Public improvements along Boylston Street will help stimulate investment to renovate existing buildings and assure a better environment for residents and workers in the Back Bay. This study notes two types of public improvements: reconstruction of streets and sidewalks, and the refurbishing of Copley Square. Other public improvements to be reviewed in the Back Bay include stabilizing groundwater levels and upgrading the sewer system. Specific recommendations will be made in other publications.

Streets and Sidewalks

Some buildings on Boylston Street have used the sidewalk to enhance their own entrances. Special paving materials that reflect the location of entries and the use of column spacing have resulted in a disjointed sidewalk. Boylston Street should be designed as a continuous boulevard linking the Fenway and the Public Garden. A pallete of sidewalk and street materials should be used to emphasize the length of Boylston Street. In particular, new trees and lighting should be planned at transit locations to improve pedestrian access.

The Authority's street and sidewalk guidelines for the new Arlington-Hadassah development, illustrated below, should be used to guide improvements on Boylston Street.



Arlington-Hadassah Street Improvements

In addition, implications of a two-way Boylston Street might be studied. A two-way scheme might allow for improved street amenities and easier pedestrian crossing of the currently wide boulevard as illustrated below.

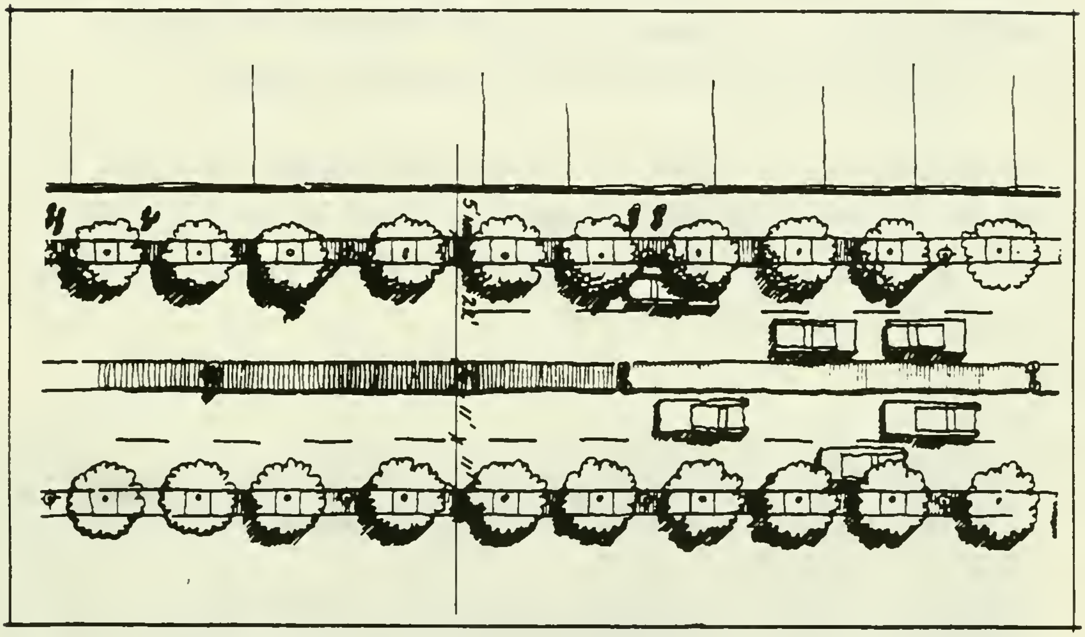


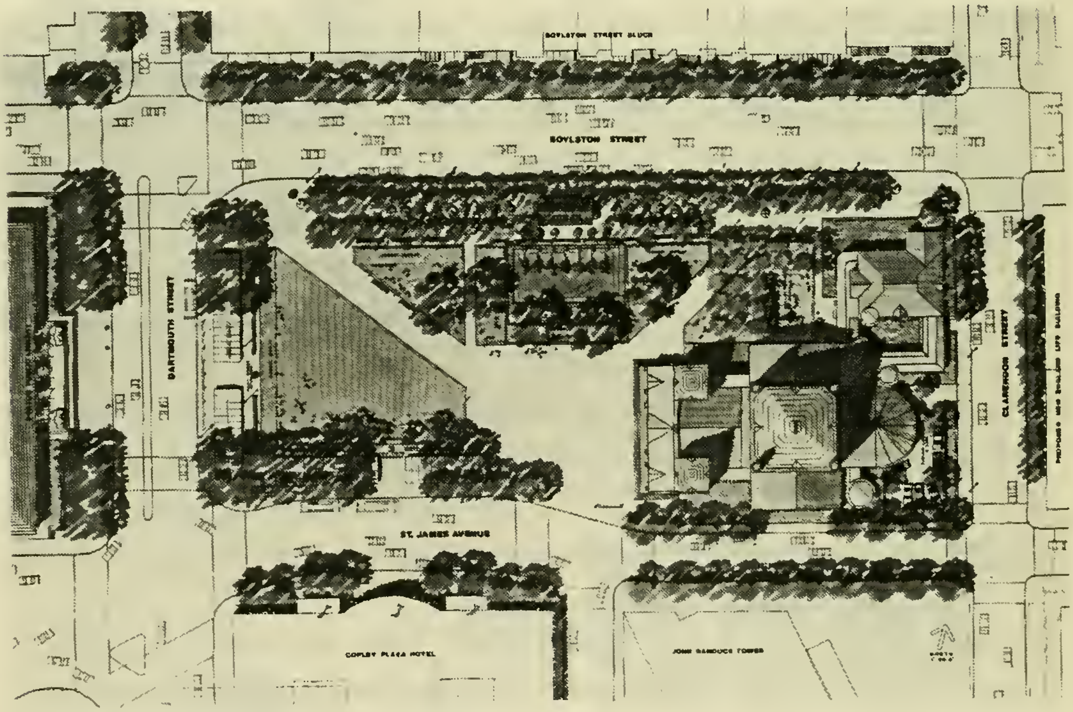
Illustration of a Two-Way Boylston Street

Copley Square Reconstruction

A major effort is underway to redesign and reconstruct Copley Square. The Copley Square Centennial Committee, composed of members of Back Bay corporate, institutional, and neighborhood organizations, has been constituted to raise at least half of the $3 million needed to reconstruct the park.

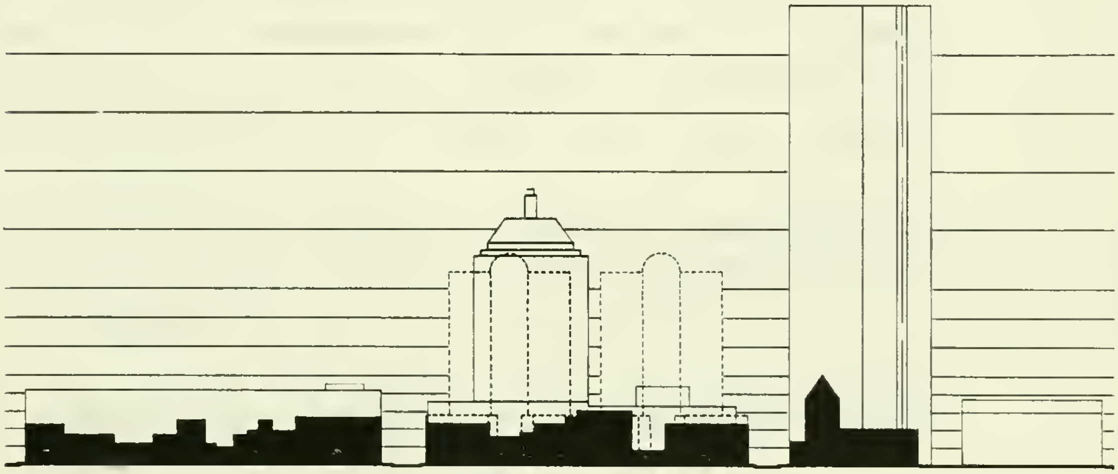
The five corporate members of the Committee, John Hancock Mutual Insurance Company, New England Mutual Life Insurance Company, Liberty Mutual Insurance Company, Prudential Insurance Company, and Urban Investment and Development Company are expected to contribute approximately $1.5 million toward this construction fund raising effort. The balance will be funded by public sources. To supplement public maintenance funds, a $1-1.5 million private endowment fund will be created.

A full design of the park may be completed within the next 12 months and reconstruction to begin as early as Spring, 1986. This schedule would allow for opening the reconstructed Copley Square during the Fall of 1986.



Proposed Redesign for Copley Square
Clarke And Rapuano, Inc., New York City
Winner of 1984 Copley Square Design Competition

FOLLOWUP

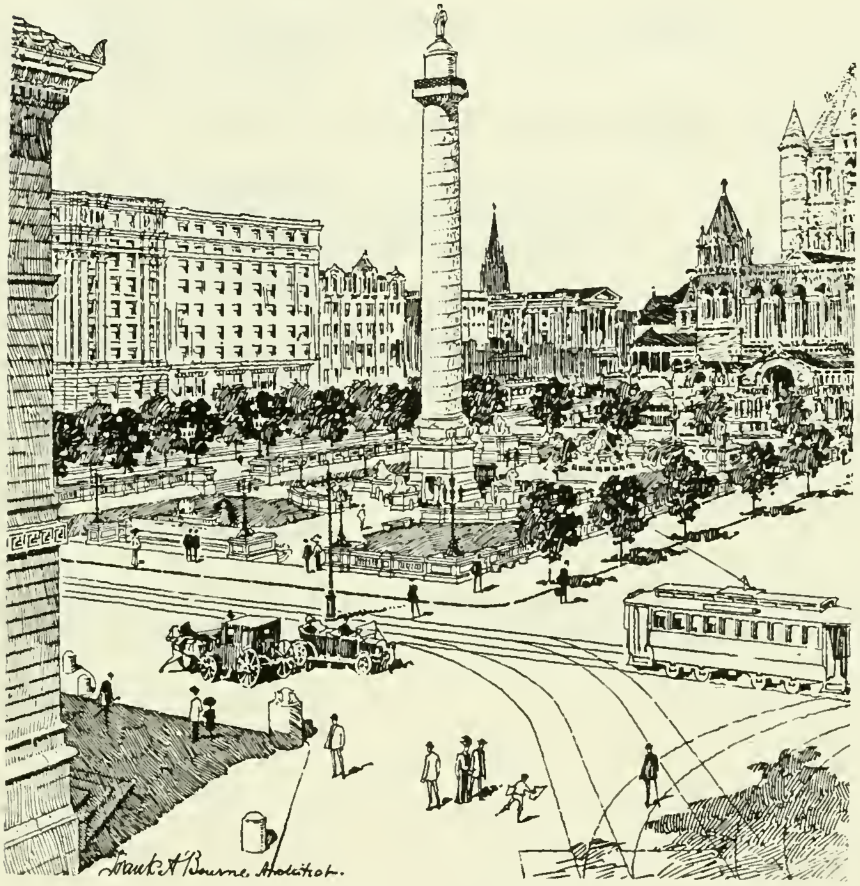


FOLLOW UP

Over the next few months several key steps must be taken for the Boylston Street Zoning Study to lead to a final report and to the implementation of its recommendations. Some steps require actions by the BRA, others by the Back Bay Architectural Commission or by the Boylston Street Citizens' Review Committee. (See Appendix IX for a description of City agencies with regulatory controls in the study area.) The long-term improvement of the Boylston Street Corridor will hinge on the following steps:

- Review of this Interim Report by the Boylston Street Citizens' Review Committee (CRC) and other interested groups and individuals.
- Establishment of additional design guidelines by the Back Bay Architectural Commission.
- Implementation of design guidelines by the Boston Redevelopment Authority for Boylston Street as an extension of Boston By Design planning efforts.
- Consideration of options for expansion of the Back Bay Architectural District to the southerly side of Boylston Street.
- Formulation of a strategy by the city and the CRC to address the chronic traffic congestion of intersections during peak hours.
- Creation of a promotion strategy by business enterprises and the CRC both to upgrade upper Boylston Street's retail uses and to continue the stabilization of lower Boylston Street's retail activity.
- Introduction of zoning changes to the Zoning Commission by the Boston Redevelopment Authority.

APPENDICES


Frank A. Bourne, Architect.

FRANK BOURNE'S PROPOSAL FOR COPLEY SQUARE, 1912

Catalyzed by a general interest in municipal improvement and beautification, the first two decades of the 20th century produced a host of suggested designs for Copley Square. Many of these were introduced to the public via newspaper articles. The October 26, 1912, Boston Transcript presented Bourne's urbane proposal which incorporated a definite visual termination for the truncated Huntington Ave.

(Exhibition entitled "Past Futures," State Street Bank, March 1985.)

APPENDICES

Appendix I: Boylston Street Zoning Study Citizens' Review Committee Members

Appendix II: Citizens' Review Committee "Matrix" of Position Statements

Appendix III: Recent Major Development in the Boylston Street Corridor

Appendix IV: Boylston Street: Shadow Profile Studies

Appendix V: Boston Landmarks Commission's Evaluation of Significance System with Criteria and Explanation of Groupings

Appendix VI: Boylston Street Preservation Study: Boston Landmarks Commission Evaluations

Appendix VII: Back Bay Historical Development Periods

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Appendix IX: Description of City Agencies with Regulatory Controls in the Study Area

APPENDIX I

Boylston Street Zoning Study Citizens' Review Committee Members

APPENDIX I

BOYLSTON STREET ZONING STUDY
CITIZENS' REVIEW COMMITTEE MEMBERS

ORGANIZATION	REPRESENTATIVE
Back Bay Architectural Commission	Richard Bertman
Back Bay Association	Marianne Abrams
Back Bay Federation	Elizabeth Whitman
Bay Village Neighborhood Association	Brian Marcus
Boston City Council	Councillor David Scondras
Boston Landmarks Commission	Marcia Myers
Boston Preservation Alliance	Susan Park
Boston Public Library	John Doherty
Boston Society of Architects	John Wilson
Boylston Street Association	Barry Hoffman
Ellis Neighborhood Association	Kenneth Gritter
Fenway Civic Association	Edward Burke
Greater Boston Chamber of Commerce	Michael Last
Greater Boston Hotel Association	Edward McCann
Greater Boston Real Estate Board	Ronald Drucker
Mass. Convention Center Authority	Francis Joyce
Mayor's Office of Business and Cultural Development	Dennis Quilty
Neighborhood Association of the Back Bay	William Hicks Paul Prindle
Newbury Street League	Jon Rotenberg
St. Botolph Citizens' Committee	Lisa Monahan
State House of Representatives	The Honorable Thomas Vallely
Old South Church	Stanley Smith
Trinity Church	The Reverend Spencer Rice

APPENDIX II

Citizens' Review Committee "Matrix" of Position Statements

QUALITY OF LIFE

CONCERNS[1]	QUALITY OF LIFE			
GROUP	IMAGE	NEIGHBORHOOD IMPACT	EXISTING USES: PROBLEMS	PEDESTRIAN AMENITIES
Old South Church	o .."Quality of life..." Human scale	o Concern for "impacts" on four adjoining neighborhoods. Congestion, traffic.	o High turnover uses.	o Need more.
Ellis Neighborhood Association	o "Main St." for surrounding neighborhoods. o "Local" character.	o Introduces housing in new development to increase safety. o Parking pressure into neighborhood.	o Parking, traffic, and balance of tourism and neighborhood needs (retail).	
Neighborhood Association of the Back Bay	o Scale down development; enhance existing character & scale of Newbury and Boylston Sts. o Sense of space, wide sidewalks. o Diverse activity.	o Pedestrian links to neighhoods. o Meet neighborhood shopping needs.	o Trash, excess of fast food establishments. o Some over development.	o Flow be encouraged between the several shopping "zones"
Back Bay Architectural Commission	o Architecturally rich. o Variety in building htgs.. o Transition/buffer zone.	o Buffer to protect adjoining neighborhoods.	o Marginal retail uses depress street life	
Newbury Street League		o Generate "positive impact" on Newbury Street	o Concern for growth on Boylston Street impacting Newbury Street image.	
Back Bay Federation	o Focal shopping attraction ("5th Ave." of Boston) o Improve "eye sore" areas (Upper Boylston).	o Back Bay residential areas be protected from commercial encroachment.	o Ground floor only occupancy be avoided o Incompatible upper and lower floor uses	o Maximum street level activity o Active street fronts o Maximum pedestrian access
Boston Society of Architects	o "Past cultural links of Boylston Street missing" o Art supply stores, galleries. o Historic buildings. o Wide sidewalks.	o Present retail does not meet residential needs o Better linkage of Back Bay to South End. o Vitality from mixed-uses	o Retail on Boylston not relating to Back Bay character o Recent buildings negative impact on quality of life and deny human scale to st.	o Frequency of entrances o More trees.
Boston Landmarks Commission	o Enhancement of existing character and context. o Small scale, variety of usage, wide sidewalks.	o Loss of unique character of area.	o Massiveness of new buildings o Quality of signage, street frontage	
Boylston Street Association	o Comm. artery for needs of all Bostonians o Regional comm. mecca o 5th Ave. of Boston		o Some poor quality retail and obsolete buildings. o Parking needs of different groups be resolved. o More extensive development has lead to increasingly higher rents o More extensive use of second floors for retail might address problems of high rents	
Back Bay Association	o Back Bay's commercial boulevard o Not clearly defined character o Integral part of CBD		o Fast food, some other uses affect character of night life o Impersonality of some developments	
Boston Preservation Alliance	o Diverse architecture o Low-rise. o Broad boulevard, light distinctive doorways	o Wind, shadow, walkability problems o Change in quality of life	o Garbage, parking, poor signage, peddlers	
Bay Village Neighborhood Association	o Streetscape, retail variety o Boulevard o Historic buildings.	o Need greater mix of uses, services for residents	o Parking, litter, lack of neighborhood stores o Poor signage, storefronts	o More trees would provide symmetry
Greater Boston Real Estate Board	o Wide sidewalks, mixed retail use o Pedestrian activity link to open spaces (Boston Garden/Copley Square) o Boulevard atmosphere somewhat like Madison Avenue	o Development on Boylston would encourage development on St. James Avenue	o New development should provide for its own parking	o Promote street edge activities in dead areas, e.g., cafes, etc.

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[1] Position Statements of the Greater Boston Hotel Association, Fenway Civic Association and St. Botolph Citizen's Committee members will be included in the Final Report

DEVELOPMENT & PLANNING ISSUES

CONCERN	DEVELOPMENT AND PLANNING ISSUES			
GROUP	FUTURE GROWTH WHERE/HOW	ECONOMIC DEVELOPMENT	TRAFFIC	PRESERVATION
Old South Church		o Rehab existing buildings.	o Any growth will exacerbate parking.	
Ellis Neighborhood Association		o Balance tourism and neighborhood needs along Boylston.	o Develop local commuter transportation for area. o Parking policy needed for existing, proposed commuter regulations (e.g., car pool).	
Neighborhood Association of the Back Bay	o Develop Master Plan	o Support mixed use with "intensified office, retail and residential uses". o Convenience retail uses required to meet local needs	o Encourage pedestrian circulation in and through area. o Concern for impact of community traffic on Cross Streets.	o Preservation and expansion of Back Bay Arch. District to include South side of Boylston Street.
Back Bay Architectural Commission	o Upgrade quality of retail.	o Lowering the scale would lower bldg. quality and incentive for development.		o Develop a 1-4 rating system-for bldgs. o Boylston St. should act as a transition between old and new, high and low development
Newbury Street League	o Revitalization of Upper Boylston Street.			
Back Bay Federation	o Intensify commercial growth on south side. o Upper Boylston to concentrate new development.			o Preservation and expansion of Back Bay Arch. District to include South side of Boylston Street
Boston Society of Architects	o Development become a "process of renewal and improvement". o More development in scale	o Against higher densities, more exclusive users. o Change in scale.	o Promote linkages to South End. o More traffic; impact on quality of life.	
Boston Landmarks Commission	o Recognize existing context. o Selective Replacement rather than large parcel developments. o Encourage rehabilitation	o Present economy working against retention of existing structures.	o Has led to inappropriately higher buildings to accommodate parking	o Expansion of Back Bay Arch District S.W. of Boylston and Copley Square. o Streetscape considerations to enhance Landmark buildings.
Boylston Street Association	o Few remaining sites for development; flatiron triangle, upper Boylston and, between Exeter and Fairfield Streets. o 7,000 more hotel rooms needed in the vicinity.	o Provide balance between economic incentives and visual and environmental impacts of new development o Down zoning economically undesirable	o Resolve parking req of residents, employees, merchants, shoppers and tourists	o Bldgs such as the Bachrach Bldg be preserved
Back Bay Association	o Up-grading and selective redevelopment be encouraged especially on upper Boylston.	o Changes in zoning would reduce economic value of development.	o Need to upgrade MBTA, encourage use o Need to consider parking impacts outside study area	o Protect what is important, also promote change o Visual diversity important
Boston Preservation Alliance		o Small affordable retail space, housing (to keep neighborhood alive day and night)	o Growth will cause greater parking shortage in outside areas	o Concern that growth will force out smaller businesses
Bay Village Neighborhood Association	o Include some mid-rise residential to anchor need for service stores	o Should not change scale as feeling of Back Bay, South End	o Will have serious impact on Back Bay and "near" South End	
Greater Boston Real Estate Board	o Encourage upscale activities.			

REGULATIONS

CONCERN	REGULATIONS			
GROUP	DESIGN REVIEW	HEIGHT AND MASSING	USE CONTROLS	MISCELLANEOUS
Old South Church		o FAR 6, immediate need for program of design review of development.		o Preserve human scale. o Avoid canyonization.
Ellis Neighborhood Association			o Housing be required as part of all new development.	
Neighborhood Association of the Back Bay	o Emphasize historical bldgs. along Boylston. o Encourage rehab. bldgs.	o Lower height limit from 155' o Maintain variety of "sky-line"	o Ensure reasonable level of evening activity. o Encourage residential use	o Control subsurface conditions caused by new development o Some residential on upper floors.
Back Bay Architectural Commission	o Guidelines to maintain massing "rhythm". o Protect Newbury Street skyline/shadow o Insure a consistent level of visual quality.			o No curb cuts.
Newbury Street League	o Special review of projects over 50,000 sq.ft.	o Present FAR 10 - O K		
Back Bay Federation	o Preservation and expansion of Back Bay Arch District.		o Reduce No. of liquor licenses. o Mixed/balanced commercial development.	
Boston Society of Architects	o Facade treatments need greater review.		o Potential retailers should go through a review process. o Retain vitality of mixed-uses	o Development along Boylston be a process of "renewal and improvement"
Boston Landmarks Commission	o B.B.A.C. should reevaluate review criteria. o New development should recognize existing context (height & bulk) o Extend B B Arch District.	o FAR and height excessive		o Some recent development, too large and bland - a loss to the texture and richness of Boylston Street.
Boylston Street Association	o Existing controls and design review process "is working"	o Down zoning not desirable	o Retain fine quality of shopping and entertainment environment.	o The exodus of low income residents from Back Bay is regreted
Back Bay Association	o Zoning change detrimental to continued revitalization of street.	o Existing zoning adequate		
Boston Preservation Alliance				o Concern for capacity of infrastructure
Bay Village Neighborhood Association		o Zoning could give benefits to make possible more street rents		
Greater Boston Real Estate Board				o Need to investigate current capacity of infrastructure

APPENDIX III

Recent Major Development in the Boylston Street Corridor

APPENDIX III

RECENT MAJOR DEVELOPMENT IN THE BOYLSTON STREET CORRIDOR

During recent years, over 4.5 million square feet of new office and mixed-use developments have been added to the Back Bay commercial sector. This office market boom has led to a number of new large scale developments being proposed or in the planning stages. A brief description of each of these projects is presented below.

Projects Completed or Underway*

- 399 Boylston Street. This mixed-use office and retail project is located on the north side of Boylston Street between Arlington and Berkeley Streets; it contains 13 floors and 230,000 square feet (gross) of floor area. Net rentable area per floor is 16,500-18,200 square feet; quoted rent is $33.00 per square foot. It will be completed for occupancy in 1985. Architect: C.B.T./Childs, Bertman, Tseckares, and Cassendino, Inc. Developer: Boylston Associates.

- One Exeter Plaza (699 Boylston Street). This mixed-use office and retail project is located at the corner of Boylston and Exeter Streets facing the Boston Public Library; it contains 15 floors and 207,000 square feet (gross) of floor area. Net rentable area per floor is 15,000 square feet; quoted rent is $25-33.00 per square foot. It will be completed for occupancy in 1985. Architect: Jung-Brannen Associates. Developer: Boylston Partners, Lawrence Rubin and Company.

- Copley Place. This mixed-use office, hotel and retail complex is located on a 9.5 acre land, and air-rights parcel over the Massachusetts Turnpike and two railroads. Copley Place includes 3.7 million square feet, and contains the Marriott and Westin Hotels, four 7 story office towers (845,000 gross square feet); three levels of shopping galleries (271,000 net square feet of retail space); a 100,000 square foot Neiman-Marcus speciality store; 104 cooperative and rental apartments; underground parking for 1,432 cars; a 9-screen cinema complex, and numerous restaurants and eating courts. Of the 845,000 square feet of office space, rentable area per floor varies from 28,850 square feet to 37,600 square feet. Recent rent ranges from $32-$38.00 per square foot. It was initially occupied in 1983. Architect: The Architects Collaborative, Inc. (Westin Hotel and Central Area); Stubbins Associates (the Marriott Hotel) and Vitols Associates (Housing). Developer: Urban Investment and Development Company.

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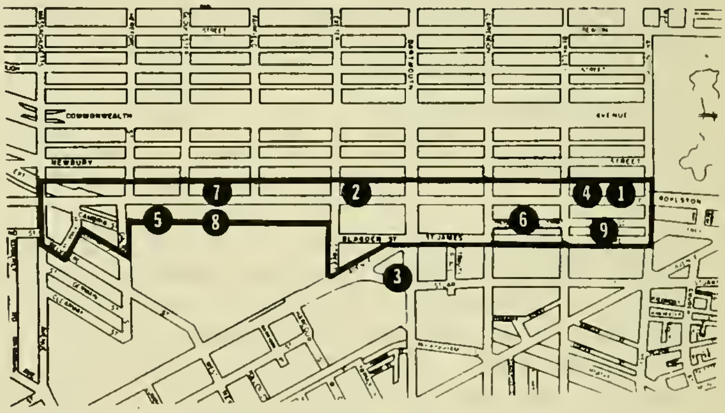
* This section is largely excerpted from Competitive Office Buildings in Boston and Cambridge, Massachusetts, the Codman Survey, and from Boston Metropolitan Area Today, 1984, Urban Land Institute.

- o Warren Chambers Building (419 Boylston Street). This mixed-use office and retail rehabilitation project is located on the north side of Boylston Street between Arlington and Berkeley Streets; it contains 8 floors and 35,000 square feet (gross) of floor area. Net rentable area per floor is 5,077 square feet. Current rent is $24.00 per square foot. It was completed for occupancy in 1984. Architect: C.B.T./Childs, Bertman, Tseckares and Cassendino, Inc. Developer: Boylston Associates.

- o Hynes Auditorium. This major expansion of the existing convention center facility is located between the Prudential Center and Dalton Street on the south side of Boylston Street. It contains 326,000 square feet of exhibition spaces. Under current plans, almost 375,000 new square feet will be added through a major renovation of the existing facility. Occupancy is expencted in 1987-1988. Architect: Kallman & McKinnell. Developer: Massachusetts Convention Center Authority.

Projects Completed or Underway
1 399 Boylston Street
2 One Exeter Plaza
3 Copley Place
4 Warren Chambers Building
5 Hynes Auditorium Expansion

Projects Proposed
6 500 Boylston Street
7 857 Boylston Street
8 Prudential Center
9 Park Square Building



Boylston Street Area: Major Development

Proposed Projects

- o 500 Boylston Street. This mixed-use office and retail project is bounded by Boylston, Berkeley, and Clarendon Streets and by St. James Avenue; it is proposed for 1,378,590 gross square feet of office and retail space. Proposed height is 25 floors (87 feet to the cornice line along Boylston Street and 330 feet to the cornice line along St. James Avenue). Below grade parking for 1,000 spaces (625 public) will be provided. The project is to be completed for occupancy in 1987 (for the western component) and in 1989 (for the eastern component). Architect: John Burgee Architects and Philip Johnson. Developers: New England Mutual Life Insurance Company and Gerald D. Hines Interests.

- o 857 Boylston Street. The proposed location for this mixed-use office and retail project is on the north side of Boylston Street, mid-block between Fairfield and Gloucester Streets; it is proposed to contain approximately 132,000 gross square feet of floor area, including 29 below grade parking spaces. Rentable area per floor averages 10,500 square feet. The project is expected to be completed for occupancy in the fourth quarter, 1987. Architect: The Architects Collaborative, Inc. Developer: 857 Boylston Street Associates (LM & W Properties Co., Inc. and Ingalls Real Estate Inc.).

- Prudential Center. The Prudential Center has proposed the addition of approximately 400,000 gross square feet of new retail space, approximately 1,300,000 gross square feet of new office space, a new 250 room hotel, 400 unit residential development, 500 additional parking spaces and a complete reworking of Prudential's Plaza areas. Prudential has proposed to phase this new development and master plan over the next 7-10 years. Architect: HOK/The Stubbins Associates. Developers: Prudential Insurance Company of America/Prudential Realty Group.

- Park Square Building. This mixed-use office and retail building fronts St. James Avenue and is bounded by Berkeley, Providence and Arlington Streets. The owners are considering adding 115,000 gross square feet of new office space, which will increase the gross floor area beyond the permitted FAR of 10. Project completion is unknown at this time. Developer: H.N. Gorin/The Beal Companies.

APPENDIX IV

Boylston Street: Shadow Profile Studies

APPENDIX IV
BOYLSTON STREET: SHADOW PROFILE STUDIES

This technical appendix examines the full impact of shadows on Newbury Street at five times each day (8 A.M., 10 A.M., 12 Noon, 2 P.M., and 4 P.M.) on October 21/February 21 and November 21/January 21. This study assumes two heights along Boylston Street a 155' building envelope to parapet line and a 120' envelope to parapet line.

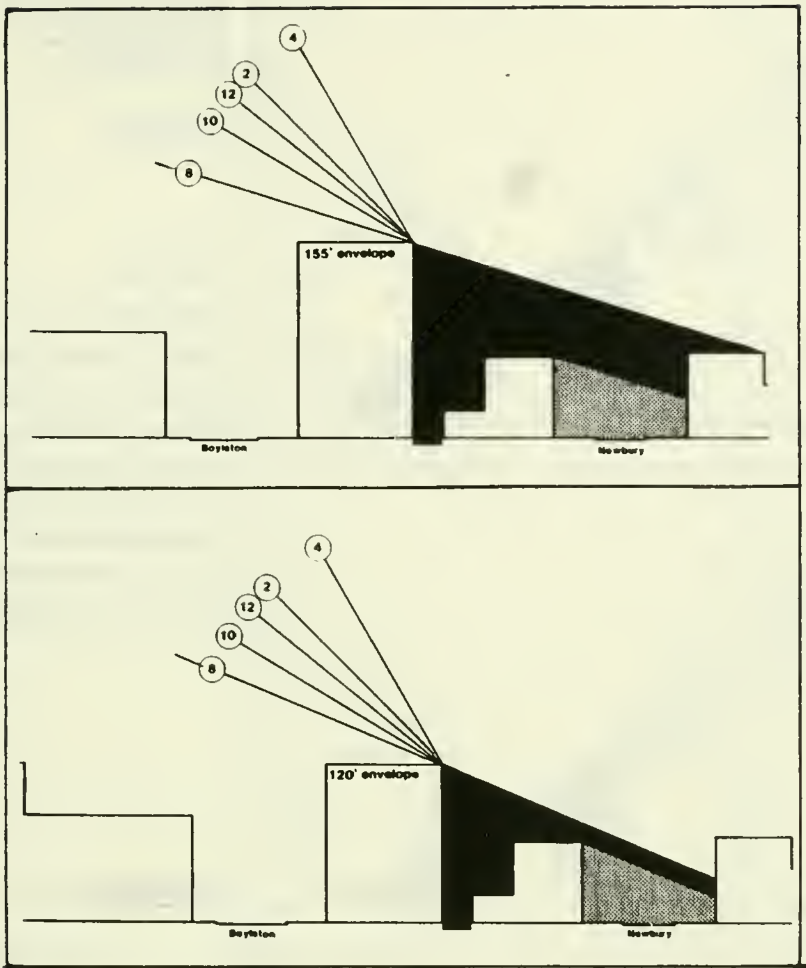
SHADOW PROFILE STUDY

8 AM

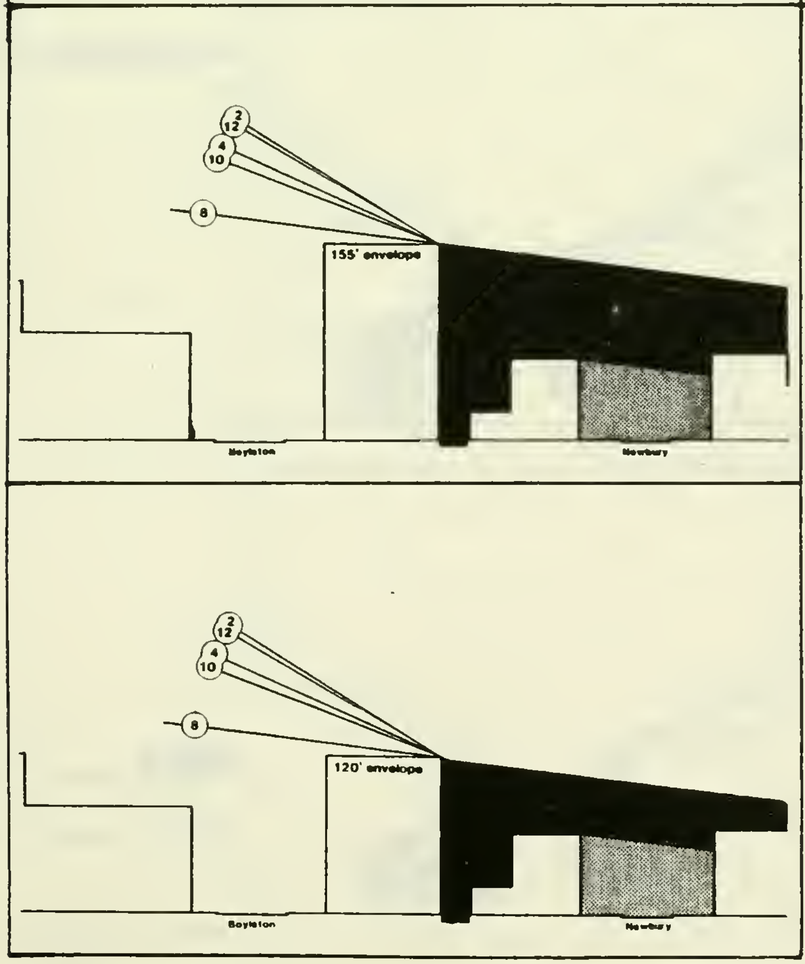
NOTE:

The profiles are taken looking directly down Boylston and Newbury streets. Darker tone indicates additional shadow impact on Newbury street North. Representative building heights: 65-70 feet on Newbury street, 85 feet on Boylston South.

OCTOBER 21 / FEBRUARY 21



NOVEMBER 21 / JANUARY 21



■ New Shadow

▨ Existing Shadow

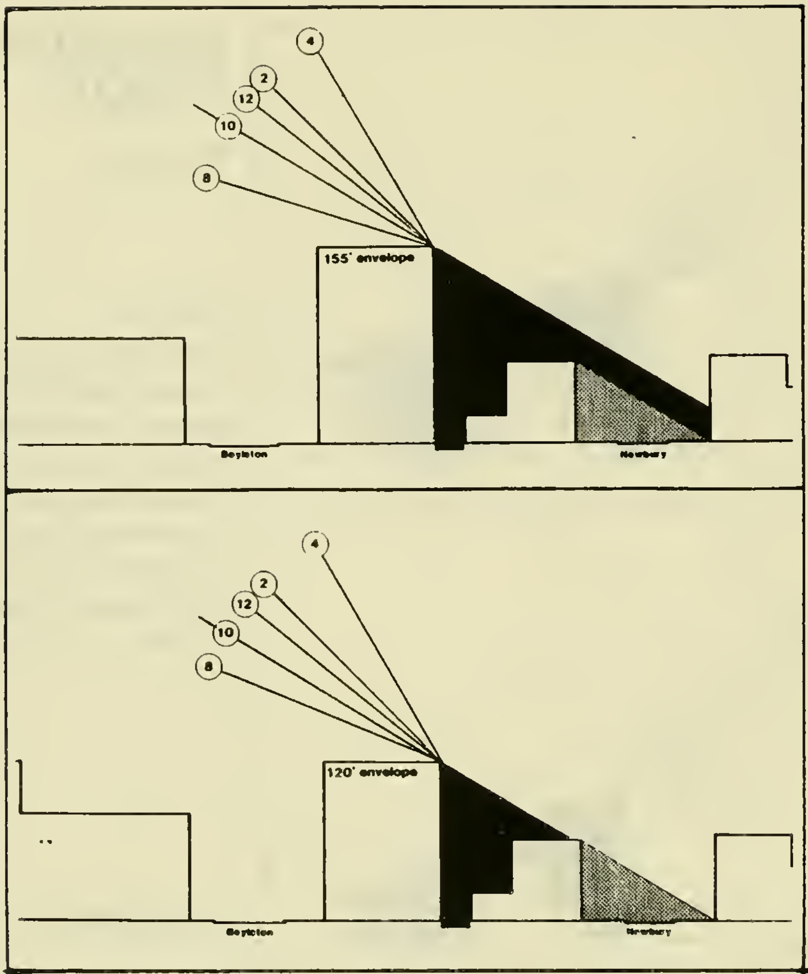
SCALE: approx. 1" : 150' 0"

SHADOW PROFIL STUDY

10AM

NOTE:

The profiles are taken looking directly down Boylston and Newbury streets. Darker tone indicates additional shadow impact on Newbury street North. Representative building heights 65-70 feet on Newbury street, 85 feet on Boylston South.



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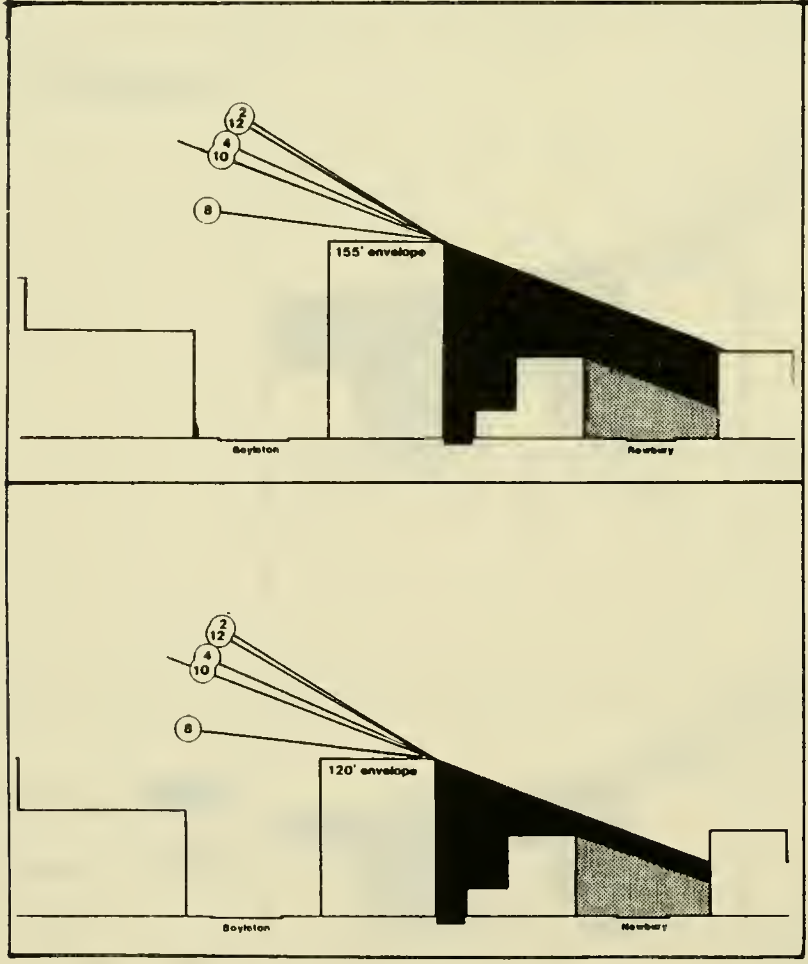


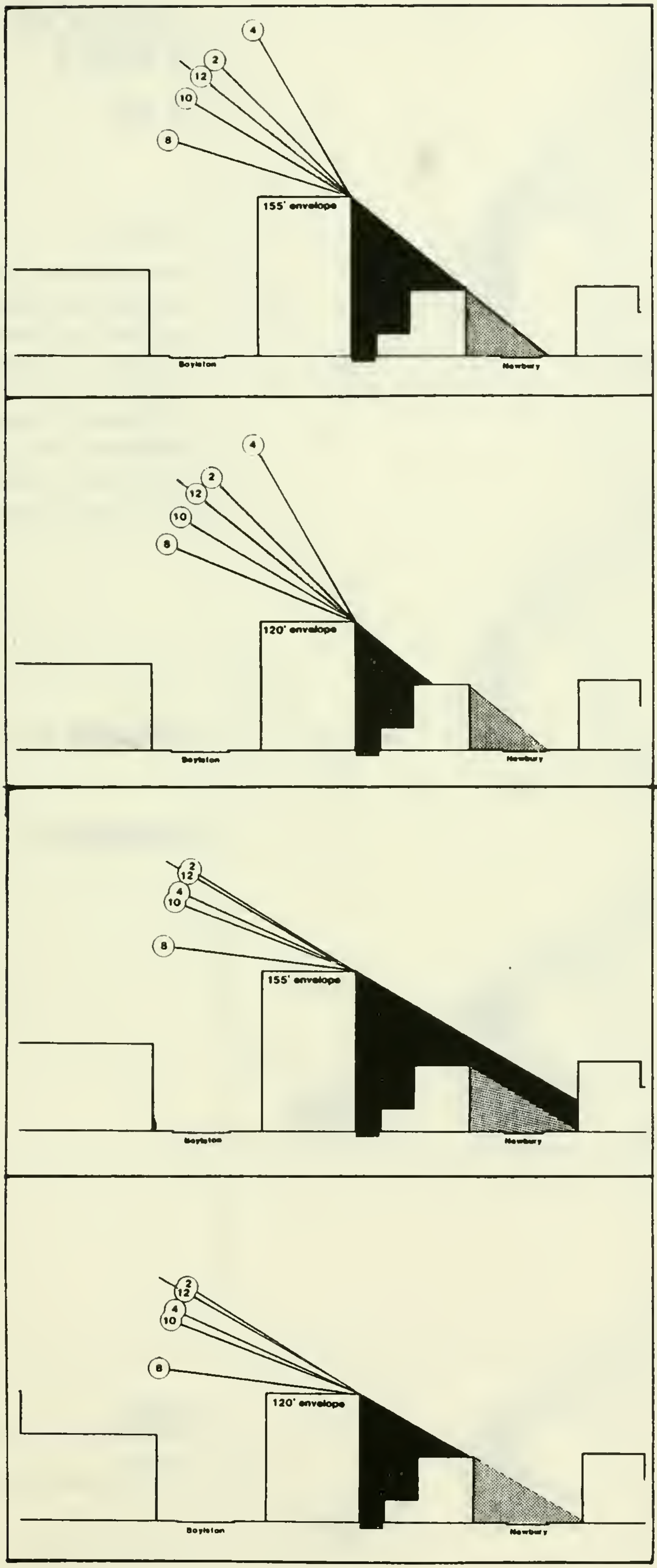
■ New Shadow

▒ Existing Shadow

SCALE: approx. 1" : 150' 0"

SHADOW PROFILE STUDY

12 NOON



NOTE:

The profiles are taken looking directly down Boylston and Newbury streets. Darker tone indicates additional shadow impact on Newbury street North. Representative building heights: 65-70 feet on Newbury street, 85 feet on Boylston South.

OCTOBER 21 / FEBRUARY 21

NOVEMBER 21 / JANUARY 21

■ New Shadow

▨ Existing Shadow

SCALE: approx. 1" : 150' 0"

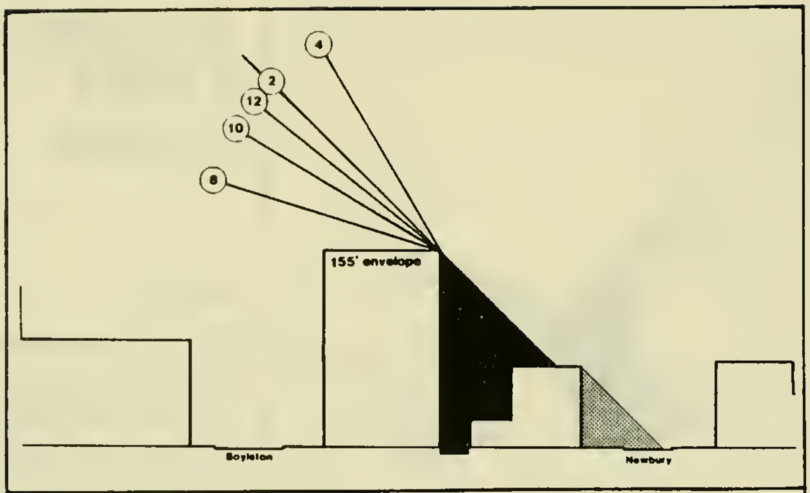
SHADOW PROFIL
STUDY

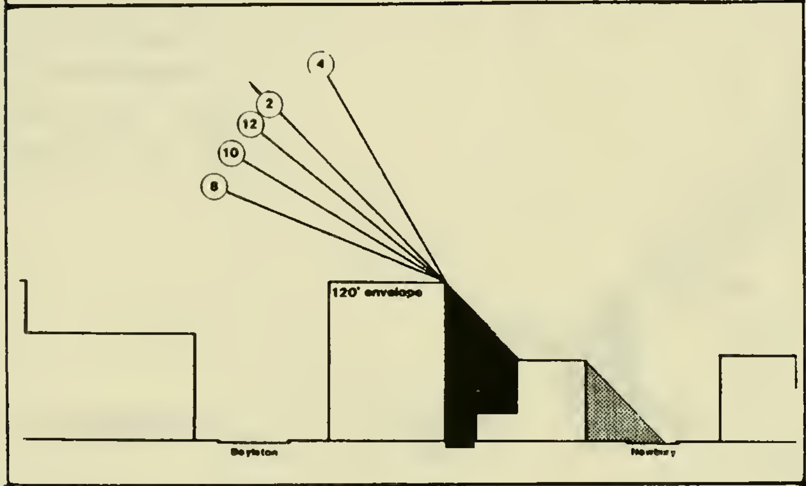
2 PM

NOTE:

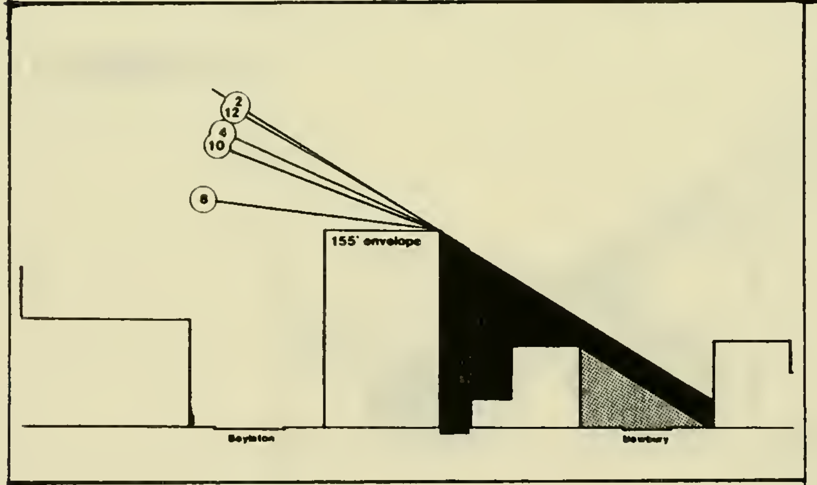
The profiles are taken looking directly down Boylston and Newbury streets. Darker tone indicates additional shadow impact on Newbury street North. Representative building heights: 65-70 feet on Newbury street, 85 feet on Boylston South.

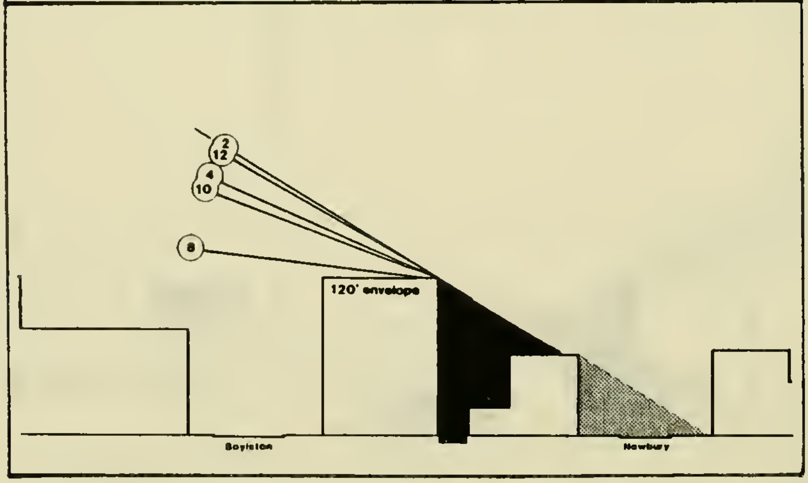
OCTOBER 21 / FEBRUARY





NOVEMBER 21 / JANUARY





■ New Shadow

▨ Existing Shadow

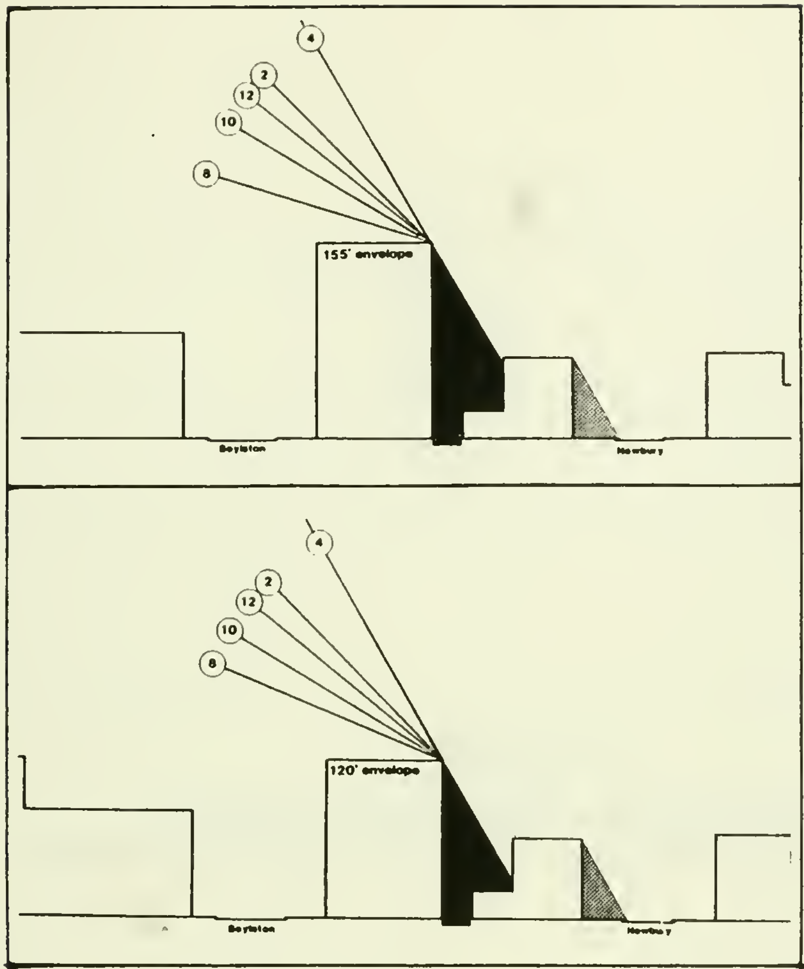
SCALE: approx. 1" : 150' 0"

SHADOW PROFILE STUDY

4 PM

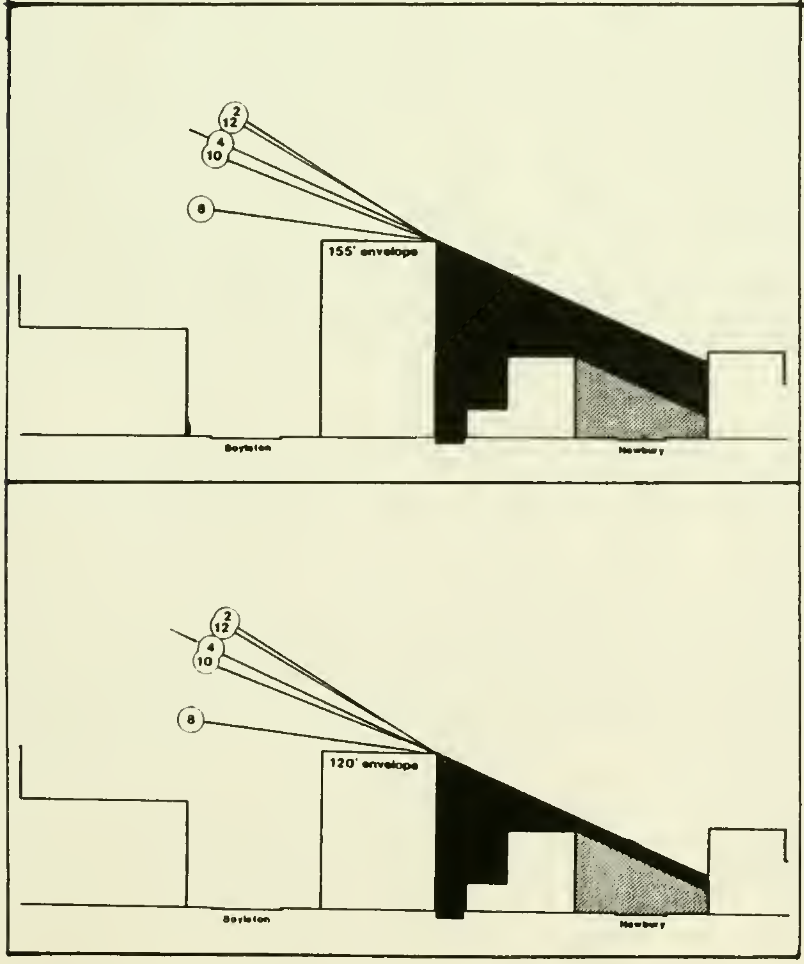
NOTE:

The profiles are taken looking directly down Boylston and Newbury streets. Darker tone indicates additional shadow impact on Newbury street North. Representative building heights: 65-70 feet on Newbury street, 85 feet on Boylston South.



OCTOBER 21 / FEBRUARY 21

NOVEMBER 21 / JANUARY 21



■ New Shadow

▨ Existing Shadow

SCALE: approx. 1" : 150' 0"

APPENDIX V

Boston Landmarks Commission's Evaluation of Significance System with Criteria and Explanation of Groupings

APPENDIX V

BOSTON LANDMARKS COMMISSION'S EVALUATION OF SIGNIFICANCE SYSTEM WITH CRITERIA AND EXPLANATION OF GROUPINGS

To fulfill its charge to identify, recognize, and protect the architectural and historical resources within Boston, the Boston Landmarks Commission (BLC) embarked on a comprehensive survey of those resources soon after its establishment in 1975. This systematic, professionally-conducted survey has proceeded on a neighborhood basis to review, identify, research and evaluate sites, structures, and districts for their significance to the local area as well as to the entire city or beyond. It is expected to be completed within the next two years.

Besides the general purpose of making the public more aware of Boston's historic resources, the survey's purpose is to recommend preservation of the significant resources, and to provide relevant information so city agencies can make sensitive informed decisions about property under their jurisdiction. The inventory, like any other data base, provides ready, comparative information that is essential to the process of looking at the inevitable changes within the City.

Methodology

The general methodology for the city-wide preservation survey incorporates four steps: field survey, documentary research, recording, and evaluation of survey findings. Field survey is the initial procedure; it is primarily conducted on foot so that all sites and areas are visually surveyed.

Sometimes the survey methodology is adapted to suit a particular set of conditions, as in the downtown commercial areas. For example, along Boylston Street each structure, no matter what its use or date of construction, was surveyed and recorded. The intensity of current development activity and consequent high level of inquiries on the status of, absence of, or need for preservation controls indicated that this "100%" recording was necessary and appropriate.

The second procedure involves documentary research using Boston area archives, libraries and relevant public and private repositories to investigate primary and secondary sources. Occasionally information is supplied by an interested property owner.

The resulting information from the field work and research are systematically recorded on the attached Building Information Forms, which is the third procedure. Each form includes a description of the structure, a photograph and a summary of significance based on the research. Collectively, the forms become the inventory.

The fourth procedure is evaluation of the entire visual survey and documentary research. It results in recommendations for preservation mechanisms and priorities. The building information forms themselves provide a basic measure of preservation value, indicating such elements as uniqueness to a neighborhood, representation of an architectural style or type, or a development period, visual prominence, or association with important national or local events, personalities, or industries.

In recent years, the Boston Landmarks Commission has adopted a building evaluation system. Consideration was given to adopting a numerical system used in some other cities; the staff desired a system to insure maximum objectivity in evaluating buildings. After extensive efforts to devise a workable system for Boston's extensive resources, it was concluded that because of the implicit value judgements made in assigning value to each criterion and in determining how a building satisfies the various criteria, the objectivity of a numerical system was questionable. Until a system can be identified which convincingly overcomes the problems of assigning numerical values to qualities of history, architecture, and urban design, which are difficult to quantify, the Commission will continue to use the intellectual discipline of systematic and thorough evaluation not involving the assignment of numerical values. Buildings constructed after 1960 are not ranked, because objectivity of the recent past is too difficult to achieve.

The evaluation system has six groupings as follows:

I. Highest Significance

Buildings in this group are considered to have national significance

- as buildings associated with Boston history, particularly the Colonial or Revolutionary War periods;
- as nationally known examples of the work of Boston architects; or,
- as examples of particular building styles or types which became prototypes for similar buildings throughout the nation or which are rare throughout the nation.

All buildings in this category merit designation as Boston Landmarks and individual listing in the National Register of Historic Places. Designation as a Boston Landmark involves protection against demolition and involves design review of subsequent exterior alterations. Outstanding interior spaces can also be specially designated as Landmarks. Listing in the National Register provides more limited protection against demolition or adverse impact from Federal action and makes owners eligible for Federal income tax incentives for rehabilitation. Listing in the State Register provides a building with similar protection from State action, but it carries no incentives.

II. Major Significance

Buildings in this category are considered to have the highest significance to the City of Boston, the Commonwealth and the New England Region

- as the city's most outstanding examples of their style or building type, distinguished for high architectural quality and high degree of intactness;
- as early or rare examples of the use of a particular style or building technology in Boston;

- as the best examples of the work of major Boston architects;
- as buildings outstanding in their setting, with particular urban design value; or,
- as buildings of the highest regional or local historical significance.

Although often less well known than buildings of Highest Significance, these buildings are also considered to meet the criteria for designation as Boston Landmarks, as well as being potentially eligible for individual listing in the National Register of Historic Places. Designation as a Boston Landmark involves protection against demolition and involves design review of proposed exterior alterations. Outstanding interior spaces can also be specifically designated as Landmarks. Listing in the National Register provides more limited protection against demolition or adverse impact from Federal action and allows owners to take advantage of Federal income tax incentives for rehabilitation. Listing in the State Register provides a building with similar protections from State action, but it carries no incentives.

III. Significant

Buildings in this group are considered to be of significance to the City of Boston

- as fine examples of the work of Boston architects;
- as buildings which make an important contribution to the character of a street or area;
- as buildings with strong historical associations with major Boston industries, organizations, institutions or events; or,
- as fine examples of a particular style or building type.

There are a large number of buildings in this group. Some may meet the criteria for designation as Boston Landmarks, and these have been subcategorized as Group III, Further Study. If after further study it is found that such buildings are significant to the Commonwealth, or the New England region as well as to the City of Boston, they may be designated as Landmarks.

All buildings in Group III are considered eligible for individual or district listing in the National Register of Historic Places and as such would also be eligible for listing in the State Register of Historic Places. Listing in the National Register provides all Group III buildings with limited protection against demolition or adverse impact as the result of Federal action and also allows owners to take advantage of Federal income tax incentives for rehabilitation. Listing in the State Historic Register provides buildings with similar protections from State action, but it carries no incentives.

IV. Notable

Buildings in this group are considered important to the character of the particular street, neighborhood, or area

- as an integral part of a visually cohesive streetscape or integral element within a district;
- as buildings with some individual architectural distinction, whether because of their materials, craftsmanship or detailing;
- as the best example in their area of particular style or building type; or,
- as buildings with some local historical significance.

Notable buildings are not considered significant enough to be designated as Boston City Landmarks or to be listed individually in the National Register of Historic Places. If they are located within a National Register District, the building owner may be eligible for tax incentives for rehabilitation. The property is protected from adverse impacts as a result of Federal or State action through an environmental review process.

V. Minor

Buildings in this group are of little architectural or historical interest but may be considered to make a minor contribution to the streetscape.

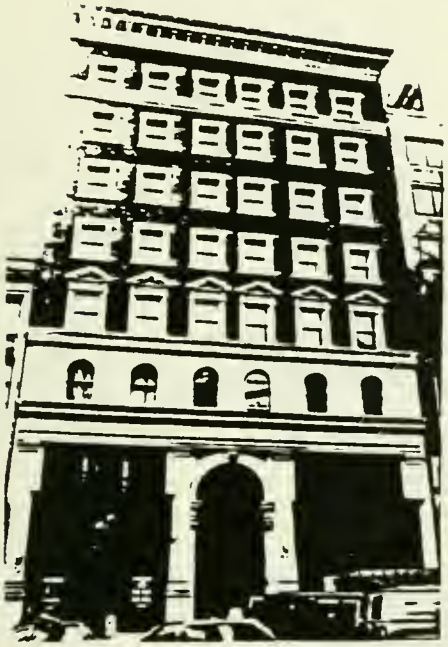
- as buildings which are compatible with surrounding structures in scale, style, materials, or fenestration patterns, or
- as buildings with some architectural interest or integrity.

Buildings in this group are not considered eligible for designation as Boston City Landmarks or for individual listing in the National Register of Historic Places. If a building falls within a National Register District, and it is considered to have enough integrity and relate sufficiently to the significant themes of the nominated district, the building owner is allowed to take advantage of Federal tax incentives for rehabilitation. The property is protected from adverse impacts as a result of Federal or Station action through an environmental review process.

VI. Non-contributing

Buildings in this group are considered to be visual intrusions, incompatible with the surrounding urban fabric. If these buildings are located within National Register Districts, they are not eligible for tax incentives for rehabilitation, and may be exempted from tax penalities for demolition.

BOSTON LANDMARKS COMMISSION Building Information Form Form No. ____ Area Back Bay



ADDRESS 415-421 Boylston St COR. ____

NAME ____ Warren Chambers Building
present original

MAP No. 24N-11E SUB AREA Boylston St.

DATE 1896-1897 Tax Certification application on file at Mass. Histor. Comm.
source

ARCHITECT William Dabney " " "
source

BUILDER ____
source

OWNER in 1915: Phillip L. Saltonstall
original present

PHOTOGRAPHS ____

TYPE (residential) single double row 2-fam. 3-deck ten apt.
[✓ (non-residential)] commercial / office

NO. OF STORIES (1st to cornice) 8 plus ---

ROOF flat cupola --- dormers ---

MATERIALS (Frame) clapboards shingles stucco asphalt asbestos alum/vinyl
[✓ (Other)] [✓ brick] [✓ stone trim] concrete iron/steel/alum.

BRIEF DESCRIPTION Six-bay Renaissance Revival style building which features two-story base (stone) divided into 3 bays by pilasters. Central entry is recessed behind round-arched, pilastered opening. Stone sheathes lower 3 floors; 3rd story, set off by cornices, contains arched 1/1 windows. Those at 4th story are elaborated by pediments and pilasters. Upper story openings are rectangular, with stone enframements. Classical cornice crowns the facade; secondary cornice at 8th story sill level.

EXTERIOR ALTERATION [✓ minor] moderate drastic ____

CONDITION [✓ good] fair poor ____ LOT AREA 7205 sq. feet

NOTEWORTHY SITE CHARACTERISTICS mid-block building in commercial row; no setback from sidewalk.

(Map)

SIGNIFICANCE (cont'd on reverse)

Architecturally significant as a handsome example of Renaissance Revival style design, the Warren Chambers building makes an important contribution to Boylston St. Planned as a medical center, the building was named for Dr. John Warren, (over)

III.

CK 11/84

Moved; date if known ________________

Themes (check as many as applicable)

Aboriginal ____
Agricultural ____
Architectural X
The Arts ____
Commerce ____
Communication ____
Community/development ____

Conservation ____
Education ____
Exploration/settlement ____
Industry ____
Military ____
Political ____

Recreation ____
Religion ____
Science/invention ____
Social/humanitarian ____
Transportation ____

Significance (include explanation of themes checked above)

founder of Harvard Medical School.

William Dabney (1855-1897), a Boston architect, worked with Henry B. Ball (as Ball and Dabney) 1890-1896, and with Henry C. Hayward (Dabney and Hayward), 1897-1899. Dabney also designed the Exchange Club (22 Batterymarch).

Preservation Consideration (accessibility, re-use possibilities, capacity for public use and enjoyment, protection, utilities, context)

located within Back Bay National Register District and
within Back Bay Architectural District.
recent rehabilitation project, utilizing Tax Act incentives

Bibliography and/or references (such as local histories, deeds, assessor's records, early maps, etc.)

Boston Building Department. Records: Building and alteration permits.

Tax Act Certification Application. On file at Massachusetts Historical Commission.

Bromley. Atlas of Boston; Back Bay. 1915.

APPENDIX VI

Boylston Street Preservation Study: Boston Landmarks Commission Evaluations

APPENDIX VI

BOYLSTON STREET PRESERVATION STUDY: BOSTON LANDMARKS COMMISSION EVALUATIONS

ADDRESS	DATE	ARCHITECT	RANKING
----------Arlington to Berkeley----------			
North side			
351	1861	Gilman, Arthur	I
355	ca. 1908-12	Unknown	IV
359-363	1909	Gray, Arthur F.	IV
399	1983	Childs, Bertman & Tseckares	unrated
415-421	1896-97	Dabney, William	III
423	1868, 1919 (Facade)	Unknown	V
429	1868, 1917 (Storefront)	Unknown	IV
431-439	1869, 1970s (Facade Altered)	Unknown	V
443-445	by 1898; 1918	Unknown	IV
South side			
324-334	1904	Rantoul, William G.	III
336-342	by 1898	Unknown	IV
344, 346-50	1897	Rodman, Warren A.	IV
352-360	1906	Parker & Thomas	IV
364-368	1926, Original 1970's (Facade Altered)	Alden, H.B.	VI
372-378	1894	Sears, Willard T.	III
380	1927	Little & Russell	IV
384-390	1928	Unknown	IV
392	1861, 1921	Davidson, J.H. (storefront)	IV
396-398	1861, 1911	Greenleaf, L.C. (storefront)	IV
400-402	1908	Bowditch, A.H.	IV
406-410	ca. 1861; later (Storefront)	Unknown	III
412-426	1905	Codman & Despradelle	II
----------Berkeley to Clarendon----------			
North side			
Bonwit Teller's	1863	Preston, Wm. Gibbons	I
485-519	1938-1942	Cram & Ferguson	IV

ADDRESS	DATE	ARCHITECT	RANKING
Berkeley to Clarendon			
South side			
452-462	ca. 1910	Cox, Allen H. (?)	III
468-472	1947;1981	Ritchie, J.H.	V
476	ca. 1915	Unknown	V
480	1956	McDonough, T.F.	VI
500	1963	Roth, Richard	unrated
510	1959	Goldberg, LeMessurier & Assoc.	VI
520-530	1957	Harrison & Abramovitz	VI
Clarendon to Dartmouth			
North side			
535-541	1971-73 (?)	Architectural Concepts and Planning, Inc. (?)	unrated
543-547	by 1972	Architectural Concepts and Planning, Inc.	unrated
551	ca. 1910	Unknown	IV
553	by 1919	Unknown	IV
557	1923	Unknown	IV
561	ca. 1915 facade (?)	Unknown	IV
567	1912	Alden, Henry Bailey	IV
569	ca. 1912 (?)	Unknown	V
571-575	1914	Alden, H.B.	III
579-583	1912	Blackall, C.H.	IV
585-591	ca. 1915	Unknown	V
601-607	1959	Goldberg, Neygresh & Kendall	VI
South side			
Trinity Church	1872-77	Richardson, H.H.	I
Dartmouth to Exeter			
North side			
635-645	1874	Cummings & Sears	I
647	1886	Lewis, G.W.	III
651-655	ca. 1908-22	Unknown	III
657	ca. 1908-22	Unknown	IV
661	ca. 1908-22	Unknown	IV
665	ca. 1908-22	Unknown	IV
667-669	1909 facade (?)	Unknown	IV
671-673	ca. 1898-1908	Unknown	IV
1 Exeter Pl.	1984	Jung/Brannen Assoc.	unrated

ADDRESS	DATE	ARCHITECT	RANKING
----------Dartmouth to Exeter----------			
South side			
Boston Public Library	1888-95	McKim, Mead & White	I
666 (BPL Addn.)	1972	Johnson, Philip	unrated
----------Exeter to Fairfield----------			
North side			
707-711	1892	Pope, George W.	III
715	1908 (?)	Peabody & Stearns (facade)	III
717-719	1890	Unknown	VI
727-731	1895	Pope, G.W.	IV
733-749	ca. 1898-1908	Unknown	III
751	1901	Bowditch, A.H.	IV
755	ca. 1898-1908	Unknown	IV
761-765	ca. 1901	Bowditch, A.H. (attrib.)	IV
777-793	1901	Bowditch, A.H.	IV
795-797	ca. 1898-1908	Unknown	V
799	1897; ca. 1970's (alteration)	Lord & Burnham (orig.)	VI
----------Exeter to Fairfield----------			
South side			
712-706	c. 1901	Bowditch, A.H.	III
760	1965	Luckman, Charles Assoc.	unrated
780	1964	Luckman, C. Assoc.	unrated
----------Fairfield to Gloucester----------			
North side			
801-807	1960	Sun Oil Co.	unrated
811	1910	Bowditch, A.H.	IV
815-825	1906	Unknown	IV
827	1890	Kelley, S.D.	IV
839-841	1963	Goldberg, A.	unrated
843-845	1893	Kelly, S.D.	VI
851-855	1909; 1972	Kendall Taylor & Co. (1972)	VI (?)
859	1918 (facade)	Carpenter, A.J., Jr.	V
863	ca. 1915	Unknown	V
867	1910	Unknown	VI (?)
885-889	1907	Shepley, Rutan & Coolidge	III

ADDRESS	DATE	ARCHITECT	RANKING
Gloucester to Hereford			
North side			
893-901	1905	Lowell, Guy	III
903	1892	Kelly, Samuel	VI
907-911	1892	Boyden, E.N.	IV
915-921	1910; 1970s	Tucker, E.A. (orig.)	VI
923-925	1902	Parker & Thomas	IV
929-939	1902	Parker & Thomas	III
South side			
Hynes Audit.	1960s		unrated
Hereford to Mass. Ave.			
North side			
943-951	1885	Vinal, Arthur H.	II
955	1886	Vinal, A.H.	II
957	ca. 1920	Unknown	IV
South side			
1046-50	1905	Allen & Collins	IV

APPENDIX VII

Back Bay Historical Development Periods

APPENDIX VII

BACK BAY HISTORICAL DEVELOPMENT PERIODS

The Back Bay, Boston's elegant residential district, was originally a broad shallow body of water located beyond the southwestern shoreline of the old Boston peninsula. The bay separated Boston from Brookline and bordered the narrow neck of land access to Roxbury in the vicinity of the present South End.

Development of the Back Bay was initiated in 1814 when the Boston and Roxbury Mill Corporation proposed a scheme to harness its tidal flow for commercial purposes. A granite-faced mill dam completed in 1821 stretched across the bay along a route corresponding to the present Beacon Street. The mill dam project, however, was soon forced to compete with steam powered manufacturing and never became the financial success envisioned by its promoters. Railroad lines built across the dammed basins in the 1830's further frustrated industrial development by impeding the flow of water in the bay. By 1849, stagnating Back Bay waters produced such an unhealthy and offensive sewerage problem that city health officials, in the interests of the public welfare demanded that the area be filled.

In 1852, a special commission was appointed by the State Legislature to prepare a plan for the development of the Back Bay. The filling of the Back Bay began in 1857. Gravel was brought from the Town of Needham by a specially constructed railroad line. By 1860, the Back Bay had been filled as far west as Clarendon Street; by 1870, the fill had reached Exeter Street; by 1880, the entire area now known as the Back Bay district was solid ground; and by 1890, the fill extended beyond Kenmore Square and was continuing along Bay State Road. At its completion, the monumental Back Bay project had added 450 acres of new land to the City of Boston.

The plan for the Back Bay District, attributed to the Boston architect Arthur Gilman, was very much influenced in its street forms by the impressive Parisian boulevards of Second Empire France. Unlike earlier residential plans for Beacon Hill or the South End, the Back Bay was not divided into tree-lined squares inspired by Georgian London, but was conceived as a grand scheme of generously landscaped parallel avenues. Commonwealth Avenue, designed as the dominant boulevard of the area, provided the district with a central linear park and served to connect the green open spaces of the Common and Public Garden with those of the Fenway system.

Boylston Street in the new area was planned for institutional uses including the lots of Copley Square, the Public Library, Massachusetts Institute of Technology, and the Museums of Fine Arts and of Natural History, while railway yards occupied considerable perimeter lands to the south. Boston's nationally influential position in architectural design during the late 19th century is reflected particularly with the institutions which chose to move here. H. H. Richardson's Trinity Church (1872) and McKim's Boston Public Library (1889) are internationally significant. Of similar prominence along Boylston Street are the former Museum of Natural History (now Bonwit Teller's, William G. Preston, 1863); Arlington Street Church (Arthur Gilman, 1861); and Old South Church (Cummings and Sears, 1874).

Despite many variations in architectural style, the Back Bay has developed as an area distinguished by a general consistency of character, form, and scale. This architectural unity, determined for the most part by the linear boulevard plan which subordinated individual town houses to the design of the street, was strongly encouraged by the uniform parcel sizes and original and far-sighted deed restrictions imposed upon Back Bay construction. These restrictions specified minimum building heights, established a system of generous setbacks on all major streets, and called for masonry construction. The mandatory building setbacks, coupled with later limitations on mass, assured the development of a continuous street facade, regular cornice and mansard lines, and a repetitive pattern of projecting oriel and bay windows.*

Boylston Street became the focus of the Back Bay's business and cultural activity, and along the street is found a significant collection of commercial buildings which reflect a variety of architectural modes prevalent from the late 19th into the 20th century in Boston. As a group, these buildings portray the changing character of the street through its history. The common eclecticism of the period's commercial architecture survives to a considerable extent on Boylston Street, and architectural styles represented include the Romanesque, Pier and Spandrel Commercial, and Beaux Arts modes. Although the first level storefronts of the buildings have been altered through the years, the upper stories generally remain intact.

o The Early Period, 1860-1880

Portions of Boylston Street were originally developed in brick row housing typical of the remainder of the district, but the street was also the principal location for a number of Back Bay's prominent institutions. In response to the area's increasing needs for commercial enterprises, some of the street's original row houses were replaced or altered to accommodate retail and office uses late in the 19th century. Only a few 1860's three- to four-story masonry row houses remain on Boylston Street, between Arlington and Berkeley, and these typically have later one- to two-story storefront additions (e.g., #392, #406-410).

o Beaux Arts Period, 1880-1920

Considerable building activity took place along Boylston Street from the late 1890's through the first two decades of the 20th century, and cohesive groupings of those structures remain today. Building heights in this period increased generally to six and eight stories. Distinctive examples of the new commercial structures put up in the 1890's include #707-711, the six-story Richardson Romanesque red brick and brownstone structure (1892, George W. Pope, architect). Others remaining from the decade, influenced by Renaissance Revival tastes, are the brick with stone trim Warren Chambers building (#415-421; 1896-7, William Dabney, architect), and 372-378 Boylston (1894, W. T. Sears). Brick bow-front apartment buildings also rose at #845 and #901-911 in the 1890's.

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* This section is largely excerpted from The Back Bay Residential District, Back Bay Architectural Commission, 1984.

Twentieth century fashions in architectural design and technological advances in building construction are also exemplified by the range of Boylston Street's buildings. While the earliest remaining 19th century structures featured window openings punched in the load bearing masonry walls, the development of steel framing made possible the expansion of window areas and the facade cladding in newly popular materials such as architectural terra cotta. A number of the early 20th century buildings have a clear pier and spandrel, rectilinear emphasis to their facades, a common trait of the Commercial Style. Decorative treatments of the time typically were derived from the Beaux Arts tradition.

Handsome extant examples of architectural terra cotta remain, and the Berkeley Building (412-426 Boylston Street) is particularly significant. Designed by the city's important architectural firm of Stephen Codman and Desire Despradelle, it was built in 1905. The design achieves a strong vertical emphasis by its series of terra cotta piers which separate large window/spandrel areas and rise continuously through five stories above the storefront level, terminating in segmental arches. Rich ornament of marine motifs is especially focused at the parapet level and in pier moldings flanking the wide central bay on Boylston Street.

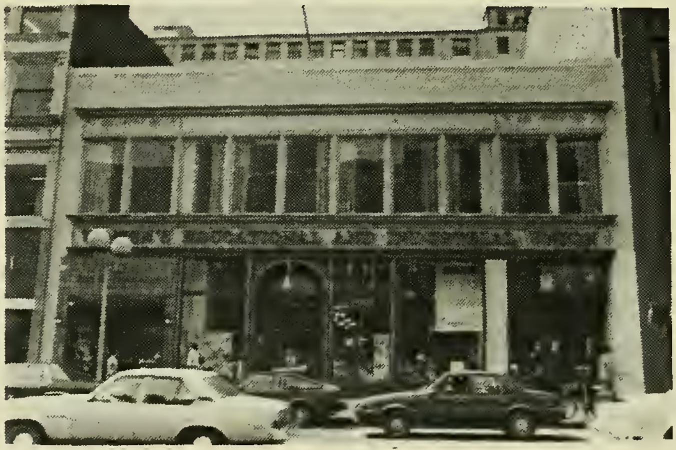
The work of the prominent Boston firm of Shepley, Rutan and Coolidge, at 885-889 Boylston Street (1907) features Beaux Arts and Mission Style decorative elements, and double-story metal-clad oriel windows. The Boylston Chambers, #739, circa 1898-1908, contains Boston's only known surviving examples of Chicago style windows. Its use of terra cotta features a flamboyantly decorative cornice above an otherwise simple grid patterned facade. Terra cotta facades are found in other stylistic modes as well, such as the Gothic Revival (e.g., 651-655 Boylston Street, erected between 1908 and 1922), and Beaux Arts (e.g, 400-402 Boylston Street, 1908, A. H. Bowditch, architect).

- The Modern Period, 1920-1970

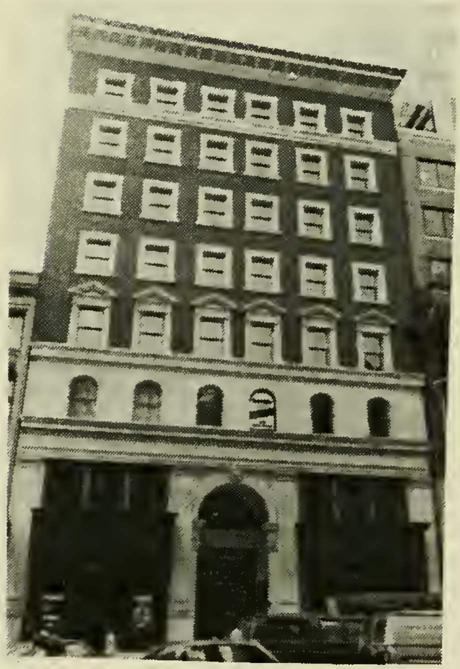
New construction on Boylston Street after the 1920's took on a new scale in the form of large-scale office buildings and developments. New England Mutual Life Insurance Company's 10-story office structure (#485-519) at the corner of Clarendon Street was put up from 1938-1942 (Cram and Ferguson, architects), taking approximately 2/3 of its block. From the 1950's to recent years, glass and metal building materials were employed in other monolithic structures, such as the IBM Building at #520-530 and the McGraw-Hill Building (#601-607). High-rises came along with the erection of the Prudential Center in the 1960's, creating greater building setbacks from the street itself. Buildings fronting directly on Boylston took on new heights as well, rising to 13-stories. Most recently, new buildings have gone up at 399 Boylston and at the corner of Exeter Street. Frequently, mid-late 20th century construction has dwarfed the street's predominant scale of historic buildings.

A common means of "updating" an older, smaller scale building's appearance has been through alterations to the street facade or storefront. Seldom have these changes been sympathetic to the original architecture. The Tello's store, 364-368 Boylston, is one example; the original facade of the 1926 building designed by H. B. Alden has been completely obliterated.

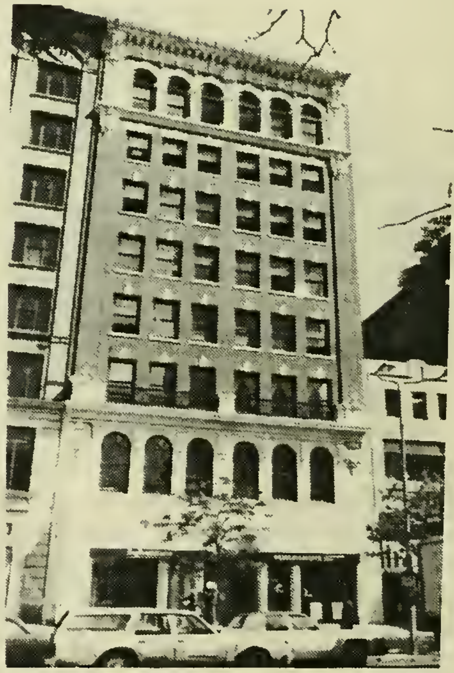
Examples of Appropriate Rehabilitations Along Boylston Street



352-360 Boylston Street



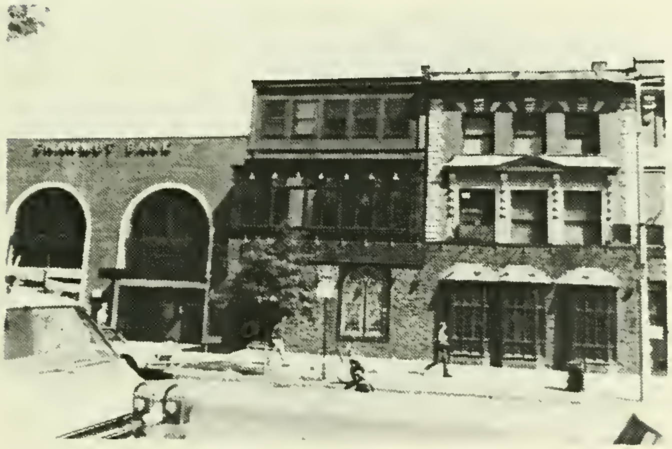
415-421 Boylston Street



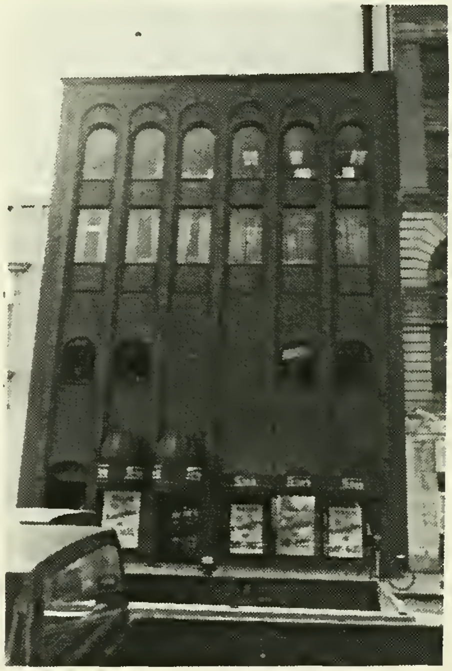
571- 575 Boylston Street

Rehabilitation projects respecting the architectural character of Boylston Street's older buildings have also occurred, such as that of the 1896-7 Warren Chambers Building (#415-421) and 1906 Women's Educational and Industrial Union (#352-360). Another important adaptive reuse has occurred through the Institute of Contemporary Art, now located in the distinguished Richardsonian Romanesque former police station on Boylston Street near Hereford Street (#955, Arthur H. Vinal, architect).

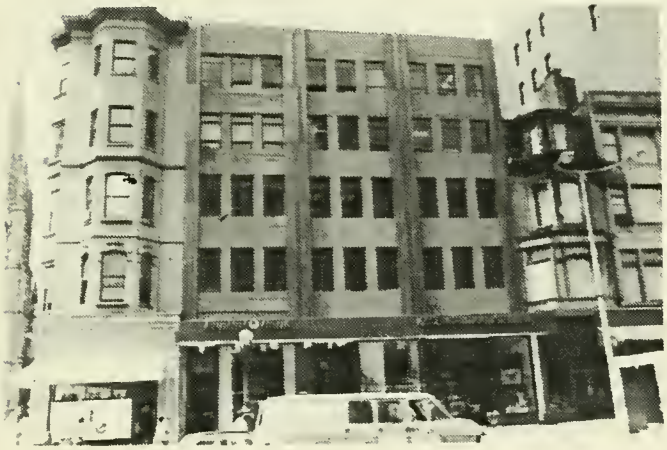
Examples of Inappropriate Rehabilitations Along Boylston Street



791-799 Boylston Street



361-368 Boylston Street



431-437 Boylston Street

APPENDIX VIII

Economic Analysis: Background Tables

EXISTING HYPOTHETICAL BUILDING CAPITALIZED VALUE

Assumptions

1.	Operating Period	1985
2.	Land Square Footage	2,800
3.	Building GSF	7,974
4.	Office GSF	5,174
5.	Retail & Lobby GSF	2,800
6.	Building Efficiency	80%
7.	Office NSF	4,139
8.	Retail NSF	2,240
9.	Office Rent ($/NSF)	$16
10.	Retail Rent ($/NSF)	$40
11.	Vacancy Factor	5%
12.	Office O/M ($/NSF)	$3.50
13.	Office/Retail RE Taxes ($/NSF)	$3.50
14.	Capitalization Rate	12.875%

Land Residual Value

Income:		
Office @ $16/NSF ('85)	$	66,224
Retail @ $40/NSF ('85)	$	89,600
Potential Gross Income	$	155,824
Vacancy @ 5%		($7,791)
Effective Gross Income	$	148,033
Expenses:		
O/M @ $3.50/NSF (Office Only)		($14,487)
Real Estate Taxes @ $3.50/NSF		($22,327)
Net Operating Income	$	111,220
Capitalized Value (@12.875%)	$	863,843
Capitalized Value/LSF	$	309

COMMERCIAL DEVELOPMENT
NEW-CONSTRUCTION - FAR 5
LOWER CONSTRUCTION COST

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Operating Start	1988
4.	Land Square Footage	16,800
5.	Total Above Ground GSF	87,360
6.	Total FAR GSF	84,000
7.	Office GSF	73,620
8.	Retail & Lobby GSF	13,740
9.	Garage GSF	13,570
10.	Net Factor, Office	86.89%
11.	Net Factor, Retail	95%
12.	Office NSF	63,968
13.	Retail NSF	8,550
14.	Parking Spaces	36
15.	Building Construction ($/GSF)	$85
16.	Garage Construction ($/GSF)	$72
17.	Soft Costs (% of Hard)	50%
18.	Contingency (% of Hard)	5%
19.	Office Rent ($/NSF)	$30
20.	Retail Rent ($/NSF)	$60
21.	Parking Income ($/space/mo.)	$212
22.	Vacancy Factor	5%
23.	Office O/M ($/NSF)	$4
24.	Office/Retail RE Taxes ($/NSF)	$4
25.	Garage Expense (% of revenue)	16%
26.	Required Return	12.5%

Land Residual Value

Acquisition Price ('85)	*
Construction Cost @ $85/GSF ('86)	$ 7,425,600
Garage Construction Cost @ $72/GSF ('86)	$ 977,040
Soft Cost @ 50% Hard Cost	$ 3,712,800
Contingency @ 5% Hard Cost	$ 371,280
Total Development Cost	$11,509,680
TDC/Building GSF	$ 132
Gross Income:	
Office @ $30/NSF ('88)	$ 1,919,053
Retail @ $60/NSF ('88)	$ 513,000
Garage @ $212/Space/Mo. ('88)	$ 91,584
Total	$ 2,523,637
Vacancy @ 5%	($126,182)
Effective Gross Income	$ 2,397,455
Expenses:	
O/M @ $4/NSF (Office Only)	($255,874)
Real Estate Taxes @ $4/NSF	($290,094)
Garage @ 16% Revenue	($ 14,653)
Total	($560,601)
Net Operating Income	$ 1,836,854
ROTPC Required	12.5%
TDC Supportable	$14,694,831
TDC	($11,509,680)
Land Residual	$ 3,185,151
Residual Value/LSF	$ 190

COMMERCIAL DEVELOPMENT
NEW. CONSTRUCTION - FAR 5
HIGHER CONSTRUCTION COST

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Operating Start	1988
4.	Land Square Footage	16,800
5.	Total Above Ground GSF	87,360
6.	Total FAR GSF	84,000
7.	Office GSF	73,620
8.	Retail & Lobby GSF	13,740
9.	Garage GSF	13,570
10.	Net Factor, Office	86.89%
11.	Net Factor, Retail	95%
12.	Office NSF	63,968
13.	Retail NSF	8,550
14.	Parking Spaces	36
15.	Building Construction ($/GSF)	$110
16.	Garage Construction ($/GSF)	$72
17.	Soft Costs (% of Hard)	50%
18.	Contingency (% of Hard)	5%
19.	Office Rent ($/NSF)	$30
20.	Retail Rent ($/NSF)	$60
21.	Parking Income ($/space/mo.)	$212
22.	Vacancy Factor	5%
23.	Office O/M ($/NSF)	$4
24.	Office/Retail RE Taxes ($/NSF)	$4
25.	Garage Expense (% of revenue)	16%
26.	Required Return	12.5%

Land Residual Value

Acquisition Price ('85)	*
Construction Cost @ $110/GSF ('86)	$ 9,609,600
Garage Construction Cost @ $72/GSF ('86)	$ 977,040
Soft Cost @ 50% Hard Cost	$ 4,804,800
Contingency @ 5% Hard Cost	$ 480,480
Total Development Cost	$14,894,880
TDC/Building GSF	$ 171
Gross Income:	
Office @ $30/NSF ('88)	$ 1,919,053
Retail @ $60/NSF ('88)	$ 513,000
Garage @ $212/Space/Mo. ('88)	$ 91,584
Total	$ 2,523,637
Vacancy @ 5%	($126,182)
Effective Gross Income	$ 2,397,455
Expenses:	
O/M @ $4/NSF Office Only	($255,874)
Real Estate Taxes @ $4/NSF	($290,094)
Garage @ 16% Revenue	($ 14,653)
Total	($560,601)
Net Operating Income	$ 1,836,854
ROTPC Required	12.5%
TDC Supportable	$14,694,831
TDC	($14,894,880)
Land Residual	($200,049)
Residual Value/LSF	($ 12)

COMMERCIAL DEVELOPMENT
NEW CONSTRUCTION - FAR 7

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Operating Start	1988
4.	Land Square Footage	16,800
5.	Total Above Ground GSF	122,304
6.	Total FAR GSF	117,600
7.	Office GSF	108,564
8.	Retail & Lobby GSF	13,740
9.	Garage GSF	13,570
10.	Net Factor, Office	86.89%
11.	Net Factor, Retail	95%
12.	Office NSF	94,331
13.	Retail NSF	8,550
14.	Parking Spaces	36
15.	Building Construction ($/GSF)	$106
16.	Garage Construction ($/GSF)	$72
17.	Soft Costs (% of Hard)	50%
18.	Contingency (% of Hard)	5%
19.	Office Rent ($/NSF)	$34
20.	Retail Rent ($/NSF)	$60
21.	Parking Income ($/space/mo.)	$212
22.	Vacancy Factor	5%
23.	Office O/M ($/NSF)	$4
24.	Office/Retail RE Taxes ($/NSF)	$4
25.	Garage Expense (% of revenue)	16%
26.	Required Return	12.5%

Land Residual Value

Acquisition Price ('85)	*
Construction Cost @ $106/GSF ('86)	$12,964,224
Garage Construction Cost @ $72/GSF ('86)	$ 977,040
Soft Cost @ 50% Hard Cost	$ 6,482,112
Contingency @ 5% Hard Cost	$ 648,211
Total Development Cost	$20,094,547
TDC/Building GSF	$ 164
Gross Income:	
Office @ $34/NSF ('88)	$ 3,207,263
Retail @ $60/NSF ('88)	$ 513,000
Garage @ $212/Space/Mo. ('88)	$ 91,584
Total	$ 3,811,847
Vacancy @ 5%	($190,592)
Effective Gross Income	$ 3,621,254
Expenses:	
O/M @ $4/NSF Office Only	($377,325)
Real Estate Taxes @ $4/NSF	($411,525)
Garage @ 16% Revenue	($ 14,653)
Total	($803,504)
Net Operating Income	$ 2,817,751
ROTPC Required	12.5%
TDC Supportable	$22,542,008
TDC	($20,094,547)
Land Residual	$ 2,447,461
Residual Value/LSF	$ 146

COMMERCIAL DEVELOPMENT
NEW CONSTRUCTION - FAR 8

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Operating Start	1988
4.	Land Square Footage	16,800
5.	Total Above Ground GSF	139,776
6.	Total FAR GSF	134,400
7.	Office GSF	125,906
8.	Retail & Lobby GSF	13,740
9.	Garage GSF	13,570
10.	Net Factor, Office	86.89%
11.	Net Factor, Retail	95%
12.	Office NSF	109,400
13.	Retail NSF	8,550
14.	Parking Spaces	36
15.	Building Construction ($/GSF)	$103
16.	Garage Construction ($/GSF)	$72
17.	Soft Costs (% of Hard)	50%
18.	Contingency (% of Hard)	5%
19.	Office Rent ($/NSF)	$36
20.	Retail Rent ($/NSF)	$60
21.	Parking Income ($/space/mo.)	$212
22.	Vacancy Factor	5%
23.	Office O/M ($/NSF)	$4
24.	Office/Retail RE Taxes ($/NSF)	$4
25.	Garage Expense (% of revenue)	16%
26.	Required Return	12.5%

Land Residual Value

Acquisition Price ('85)	*
Construction Cost @ $103/GSF ('86)	$14,383,538
Garage Construction Cost @ $72/GSF ('86)	$ 977,040
Soft Cost @ 50% Hard Cost	$ 7,191,769
Contingency @ 5% Hard Cost	$ 719,177
Total Development Cost	$22,294,484
TDC/Building GSF	$ 160
Gross Income:	
Office @ $36/NSF ('88)	$ 3,938,390
Retail @ $60/NSF ('88)	$ 513,000
Garage @ $212/Space/Mo. ('88)	$ 91,584
Total	$ 4,542,974
Vacancy @ 5%	($227,149)
Effective Gross Income	$ 4,315,825
Expenses:	
O/M @ $4/NSF Office Only	($437,599)
Real Estate Taxes @ $4/NSF	($471,799)
Garage @ 16% Revenue	($ 14,653)
Total	($924,051)
Net Operating Income	$ 3,391,774
ROTPC Required	12.5%
TDC Supportable	$27,134,193
TDC	($22,294,484)
Land Residual	$ 4,839,709
Residual Value/LSF	$ 288

COMMERCIAL DEVELOPMENT
NEW CONSTRUCTION - FAR 9

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Operating Start	1988
4.	Land Square Footage	16,800
5.	Total Above Ground GSF	157,248
6.	Total FAR GSF	151,200
7.	Office GSF	143,508
8.	Retail & Lobby GSF	13,740
9.	Garage GSF	13,570
10.	Net Factor, Office	86.89%
11.	Net Factor, Retail	95%
12.	Office NSF	124,694
13.	Retail NSF	8,550
14.	Parking Spaces	36
15.	Building Construction ($/GSF)	$100
16.	Garage Construction ($/GSF)	$72
17.	Soft Costs (% of Hard)	50%
18.	Contingency (% of Hard)	5%
19.	Office Rent ($/NSF)	$38
20.	Retail Rent ($/NSF)	$60
21.	Parking Income ($/space/mo.)	$212
22.	Vacancy Factor	5%
23.	Office O/M ($/NSF)	$4
24.	Office/Retail RE Taxes ($/NSF)	$4
25.	Garage Expense (% of revenue)	16%
26.	Required Return	12.5%

Land Residual Value

Acquisition Price ('85)	*
Construction Cost @ $100/GSF ('86)	$15,724,800
Garage Construction Cost @ $72/GSF ('86)	$ 977,040
Soft Cost @ 50% Hard Cost	$ 7,862,400
Contingency @ 5% Hard Cost	$ 786,240
Total Development Cost	$24,373,440
TDC/Building GSF	$ 155
Gross Income:	
Office @ $38/NSF ('88)	$ 4,738,376
Retail @ $60/NSF ('88)	$ 513,000
Garage @ $212/Space/Mo. ('88)	$ 91,584
Total	$ 5,342,960
Vacancy @ 5%	($267,148)
Effective Gross Income	$ 5,075,812
Expenses:	
O/M @ $4/NSF Office Only	($498,776)
Real Estate Taxes @ $4/NSF	($532,976)
Garage @ 16% Revenue	($ 14,653)
Total	($1,046,406)
Net Operating Income	$ 4,029,406
ROTPC Required	12.5%
TDC Supportable	$32,235,245
TDC	($24,373,440)
Land Residual	$ 7,861,805
Residual Value/LSF	$ 468

EXISTING BUILDING
REHABILITATION

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Operating Start	1987
4.	Land Square Footage	2,800
5.	Total Above Ground GSF	7,974
6.	Total FAR GSF	7,974
7.	Office GSF	5,174
8.	Retail & Lobby GSF	2,800
9.	Building Efficiency	80%
10.	Office NSF	4,139
11.	Retail NSF	2,240
12.	Building Rehabilitation ($/GSF)	$58
13.	Soft Costs (% of Hard)	50%
14.	Contingency (% of Hard)	10%
15.	Office Rent ($/NSF)	$22
16.	Retail Rent ($/NSF)	$56
17.	Vacancy Factor	5%
18.	Office O/M ($/NSF)	$3.50
19.	Office/Retail RE Taxes ($/NSF)	$3.50
20.	Required Return	12.5%

Land Residual Value

Acquisition Price ('85)		*
Construction Cost @ $58/GSF ('86)	$	462,492
Soft Cost @ 50% Hard Cost	$	231,246
Contingency @ 10% Hard Cost	$	46,249
Total Rehabilitation Cost	$	739,987
TDC/Building GSF	$	93
Income:		
Office @ $22/NSF ('87)	$	91,062
Retail @ $56/NSF ('87)	$	125,440
Potential Gross Income	$	216,502
Vacancy @ 5%		($ 10,825)
Effective Gross Income	$	205,677
Expenses:		
O/M @ $3.50/NSF Office Only		($ 14,487)
Real Estate Taxes @ $3.50/NSF		($ 22,327)
Net Operating Income	$	168,863
ROTPC Required		12.5%
TDC Supportable	$	1,350,903
TDC		($739,987)
Land Residual	$	610,916
Residual Value/LSF	$	218

RESIDENTIAL DEVELOPMENT
NEW CONSTRUCTION - FAR 8

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Sales Period	1988
4.	Land Square Footage	16,800
5.	Total Above Ground GSF	139,776
6.	Total FAR GSF	134,400
7.	Residential GSF	125,906
8.	Retail & Lobby GSF	13,740
9.	Garage GSF	13,570
10.	Net Factor, Residential	83%
11.	Net Factor, Retail	95%
12.	Residential NSF	104,502
13.	Retail NSF	9,671
14.	Parking Spaces	36
15.	Building Construction ($/GSF)	$95
16.	Garage Construction ($/GSF)	$72
17.	Soft Costs (% of Hard)	65%
18.	Contingency (% of Hard)	5%
19.	Residential Sales ($/NSF)	$280
20.	Parking Sales ($/space)	$23,800
21.	Marketing Expense (% of sales)	5%
22.	Retail Rent ($/NSF)	$60
23.	Vacancy Factor	5%
24.	Retail RE Taxes ($/NSF)	$4
25.	Required Return	20%
26.	Capitalization Rate	12.875%

Land Residual Value

Acquisition Price ('85)	*
Construction Cost @ $95/GSF ('86)	$11,961,070
Garage Construction Cost @ $72/GSF ('86)	$ 977,040
Soft Cost @ 65% Hard Cost	$ 7,774,696
Contingency @ 5% Hard Cost	$ 598,054
Total Development Cost	$21,310,859
TDC/Building GSF	$ 152
Residential Portion:	
Gross Sales @ $280/NSF (88')	$29,260,554
Garage Sales @ $23,800/space ('88)	$ 856,800
Marketing Cost @ 5% Gross Sales	($ 1,463,028)
Total Development Cost	($21,310,859)
Net Profit	$ 7,343,468
Required ROGS	20%
Net Profit @ 20% ROGS	$ 5,852,111
Actual Net Profit	$ 7,343,468
Land Residual	$ 1,491,357
Retail Portion:	
Income @ $60/NSF (88')	$ 580,260
Vacancy @ 5%	($ 29,013)
RE Taxes @ $4/NSF	($ 38,684)
Net Operating Income	$ 512,563
Capitalization Rate	12.875%
Capitalized Value	$ 3,981,072
Total Land Residual	$ 5,472,429
Residual Value/LSF	$ 326

EXISTING HYPOTHETICAL BUILDING
REHABILITATION - RESIDENTIAL CONVERSION

Assumptions

1.	Acquisition	1985
2.	Construction Start	1986
3.	Sales Period	1987
4.	Land Square Footage	2,800
5.	Total Above Ground GSF	7,974
6.	Total FAR GSF	7,974
7.	Residential GSF	5,174
8.	Retail & Lobby GSF	2,800
9.	Building Efficiency	80%
10.	Residential NSF	4,139
11.	Retail NSF	2,240
12.	Building Rehabilitation ($/GSF)	$58
13.	Soft Costs (% of Hard)	50%
14.	Contingency (% of Hard)	10%
15.	Residential Sales ($/NSF)	$225
16.	Retail Rent ($/NSF)	$56
17.	Vacancy Factor	5%
18.	Retail RE Taxes ($/NSF)	$3.50
19.	Marketing Expense (% of sales)	6%
20.	Required Return	20%
21.	Capitalization Rate	12.875%

Land Residual Value

Acquisition Price ('85)		*
Rehabilitation Cost @ $58/GSF ('86)	$	462,492
Soft Cost @ 65% Hard Cost	$	231,246
Contingency @ 10% Hard Cost	$	46,249
Total Rehabilitation Cost	$	739,987
TDC/Building GSF	$	93
Residential Portion:		
Gross Sales @ $225/NSF (87')	$	931,320
Marketing Cost @ 6% Gross Sales		($ 55,879)
Total Rehabilitation Cost		($739,987)
Net Profit		$135,454
Required ROGS		20%
Net Profit @ 20% ROGS	$	186,264
Actual Net Profit		$135,454
Land Residual (Funds needed)	$	(50,810)
Retail Portion:		
Income @ $56/NSF (87')	$	125,440
Vacancy @ 5%		($ 6,272)
RE Taxes @ $4/NSF		($ 7,840)
Net Operating Income	$	111,328
Capitalization Rate		12.875%
Capitalized Value	$	864,683
Total Land Residual	$	813,873
Residual Value/LSF	$	291

APPENDIX IX

Description of City Agencies with Regulatory Controls in the Study Area

APPENDIX IX

DESCRIPTION OF CITY AGENCIES WITH REGULATORY CONTROLS IN THE STUDY AREA

The information provided below is designed to assist the public in understanding the function of city government as related to the practice of development review and controls.

Back Bay Architectural Commission

- Established by the State Legislature in 1966, the Back Bay Architectural Commission was set up to protect the distinguished Victorian architecture of the Back Bay by instituting design review and approval of all changes to the exteriors of buildings which could be seen from a public way. In 1982, the jurisdiction of the Commission was amended to include exterior architectural features not necessarily seen from the public way, as well as the rear and roof-top portions of buildings.

Boston Redevelopment Authority

- Chapter 121A: Authorizes the exemption of certain Massachusetts developments from real property taxes by enabling them to make in-lieu-of tax payments based on the gross amount of income derived from the project. Developers of Chapter 121A projects in Boston are required to submit a plan to the Authority; a public hearing on that plan is then held by the Authority's Board. Upon acceptance by the Board, the proposal, including a tax arrangement, is submitted to the Mayor for his review and approval.

- Developer Designation: After the Authority reviews responses for requests to develop a specific parcel and tentatively designates a single developer, the developer then proceeds through design and other appropriate reviews. Upon their satisfactory completion, final designation may be granted by the Authority's Board after a public hearing.

- Planned Development Area: The Authority must approve PDA applications. PDA status is a special zoning designation which may be requested for sites of one acre or more in size; it affords greater flexibility in site design than allowed by the Zoning Code; and procedures for obtaining a PDA designation require a comprehensive land use and design review. To obtain a PDA zoning map designation, the developer must submit an acceptable plan for BRA review, and the Zoning Commission must adopt a map amendment. The Board of Appeal may then grant exceptions to the Zoning Code. All three procedures require public hearings.

- Development Impact Project Approval: The Zoning Code categorizes most projects of 100,000 square feet or more as Development Impact Projects. In order to increase the availability of low and moderate income housing, developers of such project approvals are required to make a development impact payment to the Neighborhood Housing Trust or to otherwise contribute to the creation of low and moderate income housing. A request for a variance, conditional use permit, exception, or zoning map or text amendment triggers the need for a Development Impact Project approval.

Development Impact Project plans must be submitted to the BRA for staff review. After staff approval, the plans are presented to the Board at a public hearing. If the Board approves the plans, the developer enters into an agreement with the BRA and the Neighborhood Housing Trust to pay a Development Impact Project exaction. The Authority's recommendation is then sent to the Board of Appeal where procedures for other zoning actions may be initiated.

In addition, the Building Commissioner cannot issue a building or use permit for a Development Impact Project unless the BRA has certified (on the application, plans, drawings, or specifications filed with the Commissioner) that the documents have undergone design review, are consistent with the approved project plan, and the applicant has entered into an exaction agreement with the BRA and the Neighborhood Housing Trust.

Boston Landmarks Commission

- Established by the State Legislature in 1975, the Boston Landmarks Commission has as its main activity the designation of historic buildings. Once designated, a building cannot be demolished or have its exterior substantially changed without a public hearing and the Commission's approval. The Commission is also directly involved in the Boston Redevelopment Authority design review process when changes to historically significant buildings are involved.

Boston Air Pollution Control Commission

- Parking Freeze Permits: To reduce air pollution, the number of parking spaces downtown was restricted through an agreement between the United States Environmental Protection Agency and the City of Boston in 1975. To construct new commercial spaces, a developer must obtain a Parking Freeze permit from the Boston Air Pollution Control Commission, issued only if an equivalent number of spaces have been eliminated somewhere within the freeze district. The Commission holds public hearings quarterly and includes public comments in its deliberations.

Zoning Board of Appeal

- Variances, Conditional Use Permits, and Exceptions: Projects which deviate from the Zoning Code may require variances, conditional use permits, and exceptions. Each of these zoning actions entails a public hearing before the Zoning Board of Appeal. The Board of Appeal makes its decision, assisted by public comments and the advice of the Boston Redevelopment Authority.

- Development Impact Projects, described above, also require the review and approval of the Board of Appeal.

Zoning Commission

- Zoning Amendments: The zoning maps and text of the Boston Zoning Code may be amended by the Zoning Commission. For example, such a request is required for PDAs, as described above. Zoning Commission actions require public hearings and mayoral approval.

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